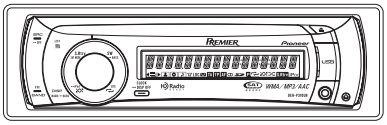
Pioneer

Service Manual



DEH-P310UB/XS/UC

ORDER NO.
CRT4247

CD RECEIVER

DEH-P310UB/XS/UC
DEH-P3100UB/XS/UC
DEH-P3100UB/XS/EW5
DEH-3100UB/XS/ES

This service manual should be used together with the following manual(s):

Model No.	Order No.	Mech.Module	Remarks
CX-3240	CRT4050	S10.5COMP2-iPod/USB	CD Mech. Module : Circuit Descriptions, Mech. Descriptions, Disassembly

For details, refer to "Important Check Points for Good Servicing".

PIONEER CORPORATION 4-1, Meguro 1-chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS (USA) INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER EUROPE NV Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 253 Alexandra Road, #04-01, Singapore 159936
ⓒ**PIONEER CORPORATION 2008**

K-ZZZ. NOV. 2008 Printed in Japan

SAFETY INFORMATION

CAUTION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer.
Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safety repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty.
If you are not qualified to perform the repair of this product properly and safety, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product contains certain electrical parts contain chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm.
Health & Safety Code Section 25249.6 - Proposition 65

Where in a manufacturer's service documentation, for example in circuit diagrams or lists of components, a symbol is used to indicate that a specific component shall be replaced only by the component specified in that documentation for safety reasons, the following symbol shall be used:

⚠

● **Safety Precautions for those who Service this Unit.**
When checking or adjusting the emitting power of the laser diode exercise caution in order to get safe, reliable results.

Caution:

1. **During repair or tests, minimum distance of 13 cm from the focus lens must be kept.**
2. **During repair or tests, do not view laser beam for 10 seconds or longer.**

CAUTION:
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

CAUTION
CLASS 1M INVISIBLE LASER RADIATION WHEN OPEN. DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS

WARNING!

The AEL (accessible emission level)of the laser power output is less than CLASS 1 but the laser component is capable of emitting radiation exceeding the limit for CLASS 1.
A specially instructed person should do servicing operation of the apparatus.

Laser diode characteristics

Wave length : 785 nm to 814 nm

Maximum output : 1 190 µW(Emitting period : unlimited)

Additional Laser Caution

Transistors Q101 in PCB drive the laser diodes.
When Q101 is shorted between their terminals, the laser diodes will radiate beam.
If the top cover is removed with no disc loaded while such short-circuit is continued, the naked eyes may be exposed to the laser beam.

CAUTION

Danger of explosion if battery is incorrectly replaced.
Replaced only with the same or equivalent type recommended by the manufacture.
Discord used batteries according to the manufacture's instructions.

[Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol.
Please be sure to confirm and follow these procedures.

1. Product safety

Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

① Use specified parts for repair.

Use genuine parts. Be sure to use important parts for safety.

② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification(addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris.
Soldering should be finished with the proper quantity. (Refer to the example)

④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs.
In addition, be sure that there are no pinched wires, etc.

⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages.
If you find a damaged power cord, please exchange it with a suitable one.

⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries.
Please pay attention to your surroundings and repair safely.

2. Adjustments

To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification.
Adjustments should be performed in accordance with the procedures/instructions described in this manual.

3. Lubricants, Glues, and Replacement parts

Use grease and adhesives that are equal to the specified substance.
Make sure the proper amount is applied.

4. Cleaning

For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

5. Shipping mode and Shipping screws

To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

CONTENTS

SAFETY INFORMATION 2
1. SERVICE PRECAUTIONS 6
1.1 SERVICE PRECAUTIONS 6
1.2 NOTES ON SOLDERING 6
2. SPECIFICATIONS 7
2.1 SPECIFICATIONS 7
2.2 DISC/CONTENT FORMAT 12
2.3 PANEL FACILITIES 13
2.4 CONNECTION DIAGRAM 22
3. BASIC ITEMS FOR SERVICE 27
3.1 CHECK POINTS AFTER SERVICING 27
3.2 PCB LOCATIONS 28
3.3 JIGS LIST 29
3.4 CLEANING 29
4. BLOCK DIAGRAM 30
5. DIAGNOSIS 33
5.1 OPERATIONAL FLOWCHART 33
5.2 ERROR CODE LIST 34
5.3 CONNECTOR FUNCTION DESCRIPTION 36
6. SERVICE MODE 37
6.1 DISPLAY TEST MODE 37
6.2 CD TEST MODE 38
7. DISASSEMBLY 40
8. EACH SETTING AND ADJUSTMENT 43
8.1 CD ADJUSTMENT 43
8.2 CHECKING THE GRATING AFTER CHANGING THE PICKUP UNIT 44
8.3 PCL OUTPUT CONFIRMATION 46
9. EXPLODED VIEWS AND PARTS LIST 48
9.1 PACKING 48
9.2 EXTERIOR (1) 50
9.3 EXTERIOR (2) 52
9.4 CD MECHANISM MODULE 54
10. SCHEMATIC DIAGRAM 56
10.1 TUNER AMP ASSY(GUIDE PAGE) 56
10.2 KEYBOARD UNIT 62
10.3 CD MECHANISM MODULE(GUIDE PAGE) 64
10.4 WAVEFORMS 70
11. PCB CONNECTION DIAGRAM 74
11.1 TUNER AMP ASSY 74
11.2 KEYBOARD UNIT 78
11.3 CD CORE UNIT(S10.5iPod-C3-CLASS1) 80
12. ELECTRICAL PARTS LIST 82

1. SERVICE PRECAUTIONS

1.1 SERVICE PRECAUTIONS

1. You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.
2. Before disassembling the unit, be sure to turn off the power. Unplugging and plugging the connectors during power-on mode may damage the ICs inside the unit.
3. To protect the pickup unit from electrostatic discharge during servicing, take an appropriate treatment (shorting-solder) by referring to "the DISASSEMBLY".
4. After replacing the pickup unit, be sure to check the grating.
5. Be careful in handling ICs. Some ICs such as MOS type are so fragile that they can be damaged by electrostatic induction.

1.2 NOTES ON SOLDERING

- For environmental protection, lead-free solder is used on the printed circuit boards mounted in this unit.
  Be sure to use lead-free solder and a soldering iron that can meet specifications for use with lead-free solders for repairs accompanied by reworking of soldering.

- Compared with conventional eutectic solders, lead-free solders have higher melting points, by approximately 40 °C.
  Therefore, for lead-free soldering, the tip temperature of a soldering iron must be set to around 373 °C in general, although the temperature depends on the heat capacity of the PC board on which reworking is required and the weight of the tip of the soldering iron.

Compared with eutectic solders, lead-free solders have higher bond strengths but slower wetting times and higher melting temperatures (hard to melt/easy to harden).

The following lead-free solders are available as service parts:

- Parts numbers of lead-free solder:
  GYP1006 1.0 in dia.
  GYP1007 0.6 in dia.
  GYP1008 0.3 in dia.

2. SPECIFICATIONS
2.1 SPECIFICATIONS

DEH-P310UB/XS/UC, DEH-P3100UB/XS/UC

General

Power source ..... 14.4 V DC (10.8 V to 15.1 V allowable)
Grounding system ..... Negative type
Max. current consumption ..... 10.0 A
Bakeup current ..... 2.8 mA to 3.1 mA

Dimensions (W × H × D):
- DIN
  - Chassis ..... 178 mm × 50 mm × 162 mm (7 in. × 2 in. × 6-3/8 in.)
  - Nose ..... 188 mm × 58 mm × 24 mm (7-3/8 in.× 2-1/4 in.× 1 in.)
- D
  - Chassis ..... 178 mm × 50 mm × 162 mm (7 in.× 2 in.× 6-3/8 in.)
  - Nose ..... 170 mm × 46 mm × 24 mm (6-3/4 in.× 1-3/4 in.× 1 in.)

Weight ..... 1.3 kg(2.9 lbs)

Audio

Maximum power output ..... 50 W × 4
50 W × 2/4 Ω + 70 W × 1/2 Ω (for subwoofer)
Continuous power output .. 22 W × 4 (50 Hz to 15 000 Hz, 5 % THD, 4 Ω load, both channels driven)
Load impedance ..... 4 Ω to 8 Ω × 4
4 Ω to 8 Ω × 2 + 2 Ω × 1
Preout max output level ..... 4 V
Equalizer (3-Band Parametric Equalizer):
- Low
  - Frequency ..... 40/80/100/160 Hz
  - Q Factor ..... 0.35/0.59/0.95/1.15 (+6 dB when boosted)
  - Gain ..... ±12 dB
- Mid
  - Frequency ..... 200/500/1k/2k Hz
  - Q Factor ..... 0.35/0.59/0.95/1.15 (+6 dB when boosted)
  - Gain ..... ±12 dB
- High
  - Frequency ..... 3.15k/8k/10k/12.5k Hz
  - Q Factor ..... 0.35/0.59/0.95/1.15 (+6 dB when boosted)
  - Gain ..... ±12 dB

HPF:
- Frequency ..... 50/63/80/100/125 Hz
- Slope ..... –12 dB/oct

Subwoofer (mono):
- Frequency ..... 50/63/80/100/125 Hz
- Slope ..... –18 dB/oct
- Gain ..... +6 dB to – 24 dB
- Phase ..... Normal/Reverse

Bass boost:
- Gain ..... +12 dB to 0 dB

CD player

System ..... Compact disc audio system
Usable discs ..... Compact disc
Signal-to-noise ratio ..... 94 dB (1 kHz) (IHF-A network)
Number of channels ..... 2 (stereo)
MP3 decoding format ..... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10, 11 (2ch audio) (Windows Media Player)
AAC decoding format ..... MPEG-4 AAC (iTunes encoded only) (.m4a) (Ver. 7.7 and earlier)
WAV signal format ..... Linear PCM & MS ADPCM (Non-compressed)

USB

USB standard specification ..... USB 2.0 full speed
Maximum current supply ... 500 mA
Maximum memory capacity ..... 250 GB
Minimum memory capacity ..... 256 MB
File system FAT16, FAT32
MP3 decoding format ..... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10, 11 (2ch audio) (Windows Media Player)
AAC decoding format ..... MPEG-4 AAC (iTunes encoded only) (.m4a) (Ver. 7.7 and earlier)
WAV signal format ..... Linear PCM & MS ADPCM (Non-compressed)

FM tuner

Frequency range ..... 87.9 MHz to 107.9 MHz
Usable sensitivity ..... 9 dBf (0.7 µV/75 Ω, mono, S/N: 30 dB)
Signal-to-noise ratio ..... 72 dB (IHF-A network)

AM tuner

Frequency range ..... 530 kHz to 1 710 kHz (10 kHz)
Usable sensitivity ..... 25 µV (S/N: 20 dB)
Signal-to-noise ratio ..... 62 dB (IHF-A network)

CEA2006 Specifications

Power output ..... 14 W RMS × 4 Channels (4 Ω and ≦ 1 % THD+N)
S/N ratio ..... 91 dBA (reference: 1 W into 4 Ω)

Note

Specifications and the design are subject to modifications without notice due to improvements.

DEH-P3100UB/XS/EW5

General

Power source ..... 14.4 V DC (10.8 V to 15.1 V allowable)
Grounding system ..... Negative type
Max. current consumption ..... 10.0 A
Bakeup current ..... 1.2 mA to 1.6 mA

Dimensions (W × H × D):
- DIN
  - Chassis ..... 180 mm × 50 mm × 162 mm
  - Nose ..... 188 mm × 58 mm × 24 mm
- D
  - Chassis ..... 178 mm × 50 mm × 162 mm
  - Nose ..... 170 mm × 46 mm × 24 mm

Weight ..... 1.3 kg

Audio

Maximum power output ..... 50 W × 4
50 W × 2/4 Ω + 70 W × 1/2 Ω (for subwoofer)
Continuous power output .. 22 W × 4 (50 Hz to 15 000 Hz, 5 % THD, 4 Ω load, both channels driven)
Load impedance ..... 4 Ω to 8 Ω × 4
4 Ω to 8 Ω × 2 + 2 Ω × 1
Preout max output level ..... 2.2 V
Equalizer (3-Band Parametric Equalizer):
- Low
  - Frequency ..... 40/80/100/160 Hz
  - Q Factor ..... 0.35/0.59/0.95/1.15 (+6 dB when boosted)
  - Gain ..... ±12 dB
- Mid
  - Frequency ..... 200/500/1k/2k Hz
  - Q Factor ..... 0.35/0.59/0.95/1.15 (+6 dB when boosted)
  - Gain ..... ±12 dB
- High
  - Frequency ..... 3.15k/8k/10k/12.5k Hz
  - Q Factor ..... 0.35/0.59/0.95/1.15 (+6 dB when boosted)
  - Gain ..... ±12 dB

HPF:
- Frequency ..... 50/63/80/100/125 Hz
- Slope ..... –12 dB/oct

Subwoofer (mono):
- Frequency ..... 50/63/80/100/125 Hz
- Slope ..... –18 dB/oct
- Gain ..... +6 dB to –24 dB
- Phase ..... Normal/Reverse

Bass boost:
- Gain ..... +12 dB to 0 dB

CD player

System ..... Compact disc audio system
Usable discs ..... Compact disc
Signal-to-noise ratio ..... 94 dB (1 kHz) (IEC-A network)
Number of channels ..... 2 (stereo)
MP3 decoding format ..... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10, 11 (2ch audio)
(Windows Media Player)
AAC decoding format ..... MPEG-4 AAC (iTunes encoded only) (.m4a)
(Ver. 7.7 and earlier)
WAV signal format ..... Linear PCM & MS ADPCM (Non-compressed)

USB

USB standard specification ..... USB 2.0 full speed
Maximum current supply ... 500 mA
Maximum memory capacity ..... 250 GB
Minimum memory capacity ..... 256 MB
File system FAT16, FAT32
MP3 decoding format ..... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10, 11 (2ch audio)
(Windows Media Player)
AAC decoding format ..... MPEG-4 AAC (iTunes encoded only) (.m4a)
(Ver. 7.7 and earlier)
WAV signal format ..... Linear PCM & MS ADPCM (Non-compressed)

FM tuner

Frequency range..... 87.5 MHz to 108.0 MHz
Usable sensitivity..... 9 dBf (0.7 µV/75 Ω, mono, S/N: 30 dB)
Signal-to-noise ratio..... 72 dB (IEC-A network)

MW tuner

Frequency range..... 531 kHz to 1 602 kHz (9 kHz)
Usable sensitivity..... 25 µV (S/N: 20 dB)
Signal-to-noise ratio..... 62 dB (IEC-A network)

LW tuner

Frequency range..... 153 kHz to 281 kHz
Usable sensitivity..... 28 µV (S/N: 20 dB)
Signal-to-noise ratio..... 62 dB (IEC-A network)

Notes

Specifications and the design are subject to modifications without notice due to improvements. ▣

DEH-3100UB/XS/ES

General

Rated power source ..... 14.4 V DC
(allowable voltage range: 12.0 V to 14.4 V DC)
Grounding system ..... Negative type
Max. current consumption ..... 10.0 A
Bakeup current ..... 2.8 mA to 3.1 mA

Dimensions (W × H × D):
- DIN
  - Chassis ..... 178 mm × 50 mm × 162 mm
  - Nose ..... 188 mm × 58 mm × 24 mm
- D
  - Chassis ..... 178 mm × 50 mm × 162 mm
  - Nose ..... 170 mm × 46 mm × 24 mm

Weight ..... 1.3 kg

Audio

Maximum power output ..... 50 W × 4
50 W × 2/4 Ω + 70 W × 1/2 Ω (for subwoofer)
Continuous power output .. 22 W × 4 (50 Hz to 15 000 Hz, 5 % THD, 4 Ω load, both channels driven)
Load impedance ..... 4 Ω to 8 Ω × 4
4 Ω to 8 Ω × 2 + 2 Ω × 1
Preout max output level ..... 2.2 V
Equalizer (3-Band Parametric Equalizer):
- Low
  - Frequency ..... 40/80/100/160 Hz
  - Q Factor ..... 0.35/0.59/0.95/1.15 (+6 dB when boosted)
  - Gain ..... ±12 dB
- Mid
  - Frequency ..... 200/500/1k/2k Hz
  - Q Factor ..... 0.35/0.59/0.95/1.15 (+6 dB when boosted)
  - Gain ..... ±12 dB
- High
  - Frequency ..... 3.15k/8k/10k/12.5k Hz
  - Q Factor ..... 0.35/0.59/0.95/1.15 (+6 dB when boosted)
  - Gain ..... ±12 dB

HPF:
- Frequency ..... 50/63/80/100/125 Hz
- Slope ..... –12 dB/oct

Subwoofer (mono):
- Frequency ..... 50/63/80/100/125 Hz
- Slope ..... –18 dB/oct
- Gain ..... +6 dB to –24 dB
- Phase ..... Normal/Reverse

Bass boost:
- Gain ..... +12 dB to 0 dB

CD player

System ..... Compact disc audio system
Usable discs ..... Compact disc
Signal-to-noise ratio ..... 94 dB (1 kHz) (IEC-A network)
Number of channels ..... 2 (stereo)
MP3 decoding format ..... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10, 11 (2ch audio)
(Windows Media Player)
AAC decoding format ..... MPEG-4 AAC (iTunes encoded only) (.m4a)
(Ver. 7.7 and earlier)
WAV signal format ..... Linear PCM & MS ADPCM (Non-compressed)

USB

USB standard specification ..... USB 2.0 full speed
Maximum current supply ... 500 mA
Maximum memory capacity ..... 250 GB
Minimum memory capacity ..... 256 MB
File system FAT16, FAT32
MP3 decoding format ..... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10, 11 (2ch audio)
(Windows Media Player)
AAC decoding format ..... MPEG-4 AAC (iTunes encoded only) (.m4a)
(Ver. 7.7 and earlier)
WAV signal format ..... Linear PCM & MS ADPCM (Non-compressed)

FM tuner

Frequency range..... 87.5 MHz to 108.0 MHz
Usable sensitivity..... 9 dBf (0.7 µV/75 Ω , mono, S/N: 30 dB)
Signal-to-noise ratio..... 72 dB (IEC-A network)

AM tuner

Frequency range..... 531 kHz to 1 602 kHz (9 kHz)
530 kHz to 1 640 kHz (10 kHz)
Usable sensitivity..... 25 µV (S/N: 20 dB)
Signal-to-noise ratio..... 62 dB (IEC-A network)

Infrared remote control

Wavelength..... 940 nm ±50 nm
Output ..... typ; 12 mw/sr per Infrared LED

Notes

Specifications and the design are subject to modifications without notice due to improvements. ■

2.2 DISC/CONTENT FORMAT

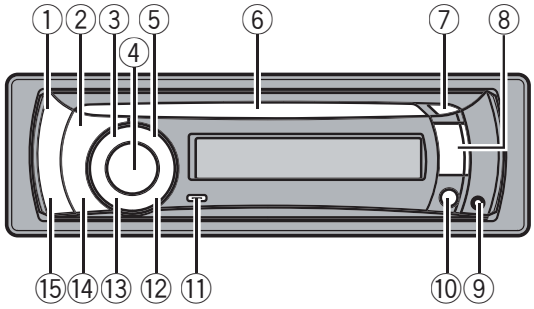
(DEH-P310UB/XS/UC, DEH-P3100UB/XS/UC)

2.3 PANEL FACILITIES

DEH-P310UB/XS/UC, DEH-P3100UB/XS/UC

What 's what

Head unit



① **SRC/OFF button**
This unit is turned on by selecting a source. Press to cycle through all the available sources.

② **/LIST button**
Press to display the track title list, folder list, file list or preset channel list depending on the source.
Press and hold to switch to link play mode while using an iPod.
For details, refer toSelecting songs from lists related to the currently playing song.

③ **S.Rtrv/SAT button**
Press to switch Sound Retriever settings.
For details, refer to Using Sound Retriever.

When XM tuner or SIRIUS tuner is selected as the source, press to change the channel select mode.
When SIRIUS tuner is selected as the source, press and hold to perform the Instant Replay mode.

④ **MULTI-CONTROL**
Move to perform manual seek tuning, fast forward, reverse and track search controls. Also used for controlling functions.
Turn to increase or decrease the volume.

⑤ **SW/BASS button**
Press to switch to subwoofer setting menu. When operating subwoofer menu, press to switch menu.
Press and hold to switch to bass boost menu.

⑥ **Disc loading slot**
Insert a CD/CD-R/CD-RW to play.

⑦ **⏏ (eject) button**
Press to eject a CD/CD-R/CD-RW.

⑧ **USB port**
Use to connect a USB storage device.
- When connecting, open up the USB connector lid.
- Use a USB cable to connect the USB storage device to the USB port. Since the USB storage device is projected forward from the unit, it is dangerous to connect directly.
  Pioneer CD-U50E USB cable is also available. For details, consult your dealer.

⑨ **(detach) button**
Press to remove the front panel from the head unit.

⑩ **AUX input jack (3.5 mm stereo jack)**
Use to connect an auxiliary device.

⑪ **CLOCK/DISP OFF button**
Press to change to the clock display.
Press and hold to turn the display indication and button illumination off or on.

⑫ **(repeat)/LOC button**
Press to switch the repeat play range while using CD, USB or iPod.
Press to switch local settings while using tuner as the source.

⑬ **(random)/iPod button**
Press to turn random function on or off while using CD or USB.

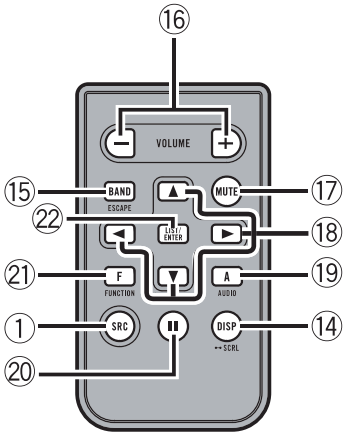
While using an iPod, press to shuffle all tracks.
Press and hold to switch the control mode while using an iPod.
For details, refer to Operating this unit ' s iPod function from your iPod.

⑭ **DISP/BACK/SCRL button**
Press to select different displays.
Press and hold to scroll through the text information.
Press to return to the previous display when operating the menu.
Press and hold to return to the main menu when operating the menu.

⑮ **BAND/ESC button**
Press to select among three FM bands and one AM band.
Press to return to the ordinary display when operating the menu.

Remote control

Operation is the same as when using the buttons on the head unit.



⑯ **VOLUME buttons**
Press to increase or decrease the volume.

⑰ **MUTE button**
Press to turn off the sound. To turn on the sound, press again.

⑱ **▲/▼/◄/► buttons**
Press to perform manual seek tuning, fast forward, reverse and track search controls.
Also used for controlling functions.

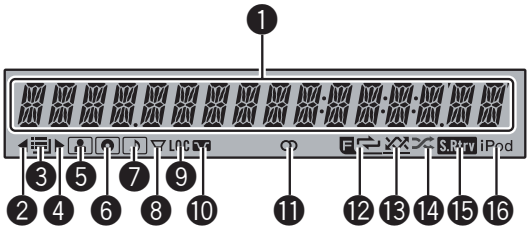
⑲ **AUDIO button**
Press to select an audio function.

⑳ **II button**
Press to turn pause on or off.

㉑ **FUNCTION button**
Press to select functions.

㉒ **LIST/ENTER button**
Press to display the disc title list, track title list, folder list, file list or preset channel list depending on the source.
While in the operating menu, press to control functions.

Display indication



❶ **Main display section**
Displays band, frequency, elapsed playback time and other settings.
- Tuner
  Band and frequency are displayed.
- Built-in CD player, USB storage device, iPod
  Elapsed playback time and literal information are displayed.

❷ **◄ indicator**
Appears when an upper tier of folder or menu exists.

❸ **(list) indicator**
Appears when operating list function.

❹ **► indicator**
Appears when a lower tier of folder or menu exists.

❺ **(artist) indicator**
Appears when the disc (track) artist name is displayed on the main display section.
Appears when artist search refinement on the iPod browsing function is in use.

❻ **(disc) indicator**
Appears when the disc (album) name is displayed on the main display section.
Appears when album search refinement on the iPod browsing function is in use.

❼ **(song) indicator**
Appears when the track (song) name is displayed on the main display section.
Appears when song search refinement on the iPod browsing function is in use.

❽ **(subwoofer) indicator**
Appears when subwoofer is on.

❾ **LOC indicator**
Appears when local seek tuning is on.

❿ **(loudness) indicator**
Appears when loudness is on.

⓫ **(stereo) indicator**
Appears when the selected frequency is being broadcast in stereo.

⓬ **F (folder repeat) indicator**
Appears when folder repeat is on.
When repeat function is on, only is displayed.

⓭ **F (folder random) indicator**
Appears when folder random is on.
When random function is on, only is displayed.

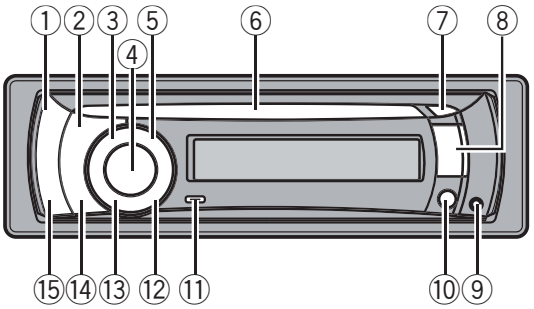
⓮ **(shuffle) indicator**
Appears when shuffle function is on while iPod source is being selected.

⓯ **S.Rtrv indicator**
Appears when Sound Retriever function is on.
For details, refer to Using Sound Retriever.

⓰ **iPod indicator**
Appears when **CONTROL** (control mode) is set to **IPOD**.
For details about the control mode, refer to Operating this unit's iPod function from your iPod. ■

What 's what

Head unit



① **SRC/OFF button**
This unit is turned on by selecting a source. Press to cycle through all the available sources.

② **/LIST button**
Press to display the disc title list, track title list, folder list, file list or preset channel list depending on the source.
Press and hold to switch to link play mode while using an iPod.
For details, refer toSelecting songs from lists related to the currently playing song.

③ **S.Rtrv button**
Press to switch Sound Retriever settings.
For details, refer to Using Sound Retriever.

④ **MULTI-CONTROL**
Move to perform manual seek tuning, fast forward, reverse and track search controls. Also used for controlling functions.
Turn to increase or decrease the volume.

⑤ **MUTE button**
Press to turn off the sound. To turn on the sound, press again.

⑥ **Disc loading slot**
Insert a CD/CD-R/CD-RW to play.

⑦ **(eject) button**
Press to eject a CD/CD-R/CD-RW.

⑧ **USB port**
Use to connect a USB storage device.
- When connecting, open up the USB connector lid.
- Use a USB cable to connect the USB storage device to the USB port. Since the USB storage device is projected forward from the unit, it is dangerous to connect directly.
  Pioneer CD-U50E USB cable is also available. For details, consult your dealer.

⑨ **(detach) button**
Press to remove the front panel from the head unit.

⑩ **AUX input jack (3.5 mm stereo jack)**
Use to connect an auxiliary device.

⑪ **TA/NEWS button**
Press to turn TA function on or off. Press and hold to turn NEWS function on or off.

⑫ **(repeat)/LOC button**
Press to switch the repeat play range while using CD, USB/SD or iPod.
Press to switch local settings while using tuner as the source.

⑬ **(random)/iPod button**
Press to turn random function on or off while using CD or USB/SD.

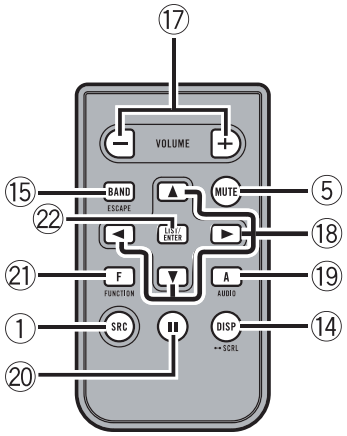
While using an iPod, press to shuffle all tracks.
Press and hold to switch the control mode while using an iPod.
For details, refer to Operating this unit's iPod function from your iPod.
If using the iPod with an interface adapter (CD-IB100 II), press to switch the shuffle function.

⑭ **DISP/BACK/SCRL button**
Press to select different displays.
Press and hold to scroll through the text information.
Press to return to the previous display when operating the menu.
Press and hold to return to the main menu when operating the menu.

⑮ **BAND/ESC button**
Press to select among three FM bands and MW/LW bands.
Press to return to the ordinary display when operating the menu.

Optional remote control

The remote control CD-R320 is sold separately. Operation is the same as when using the buttons on the head unit.



⑰ **VOLUME buttons**
Press to increase or decrease the volume.

⑱ **▲/▼/◄/► buttons**
Press to perform manual seek tuning, fast forward, reverse and track search controls.
Also used for controlling functions.

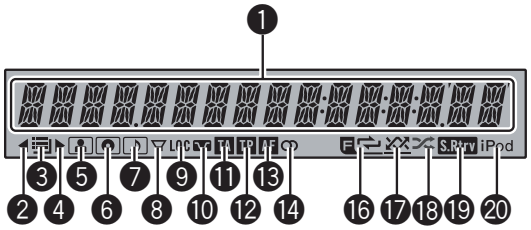
⑲ **AUDIO button**
Press to select an audio function.

⑳ **II button**
Press to turn pause on or off.

㉑ **FUNCTION button**
Press to select functions.

㉒ **LIST/ENTER button**
Press to display the disc title list, track title list, folder list, file list or preset channel list depending on the source.
While in the operating menu, press to control functions.

Display indication



❶ **Main display section**
Displays band, frequency, elapsed playback time and other settings.
- Tuner
  Band and frequency are displayed.
- RDS
  Program service name, PTY information and other literal information are displayed.
- Built-in CD player, external storage device (USB), iPod
  Elapsed playback time and literal information are displayed.

❷ **◄ indicator**
Appears when an upper tier of folder or menu exists.

❸ **(list) indicator**
Appears when operating list function.

❹ **► indicator**
Appears when a lower tier of folder or menu exists.

❺ **(artist) indicator**
Appears when the disc (track) artist name is displayed on the main display section.
Appears when artist search refinement on the iPod browsing function is in use.

❻ **(disc) indicator**
Appears when the disc (album) name is displayed on the main display section.
Appears when album search refinement on the iPod browsing function is in use.

❼ **(song) indicator**
Appears when the track (song) name is displayed on the main display section.
Appears when song search refinement on the iPod browsing function is in use.

❽ **(subwoofer) indicator**
Appears when subwoofer is on.

❾ **LOC indicator**
Appears when local seek tuning is on.

❿ **(loudness) indicator**
Appears when loudness is on.

⓫ **TA (TA) indicator**
Appears when TA (traffic announcement standby) function is on.

⓬ **TP (TP) indicator**
Appears when a TP station is tuned in.

⓭ **AF (AF) indicator**
Appears when AF (alternative frequencies search) function is on.

⓮ **(stereo) indicator**
Appears when the selected frequency is being broadcast in stereo.

⓰ **F (folder repeat) indicator**
Appears when folder repeat is on.
When repeat function is on, only is displayed.

⓱ **F (folder random) indicator**
Appears when folder random is on.
When random function is on, only is displayed.

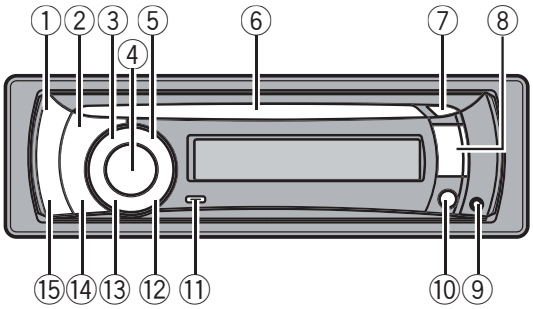
⓲ **(shuffle) indicator**
Appears when shuffle function is on while iPod source is being selected.

⓳ **S.Rtrv indicator**
Appears when Sound Retriever function is on.
For details, refer to Using Sound Retriever.

⓴ iPod **indicator**
Appears when **CONTROL** (control mode) is set to **IPOD**.
For details about the control mode, refer to Operating this unit's iPod function from your iPod. ■

What 's what

Head unit



① **SRC/OFF button**
This unit is turned on by selecting a source.
Press to cycle through all the available sources.

② **/LIST button**
Press to display the track title list, folder list, file list or preset channel list depending on the source.
Press and hold to switch to link play mode while using an iPod.
For details, refer toSelecting songs from lists related to the currently playing song.

③ **S.Rtrv button**
Press to switch Sound Retriever settings.
For details, refer to Using Sound Retriever.

④ **MULTI-CONTROL**
Move to perform manual seek tuning, fast forward, reverse and track search controls.
Also used for controlling functions.
Turn to increase or decrease the volume.

⑤ **SW/BASS button**
Press to switch to subwoofer setting menu.
When operating subwoofer menu, press to switch menu.
Press and hold to switch to bass boost menu.

⑥ **Disc loading slot**
Insert a CD/CD-R/CD-RW to play.

⑦ **▲ (eject) button**
Press to eject a CD/CD-R/CD-RW.

⑧ **USB port**
Use to connect a USB storage device.
- When connecting, open up the USB connector lid.
- Use a USB cable to connect the USB storage device to the USB port. Since the USB storage device is projected forward from the unit, it is dangerous to connect directly.
  Pioneer CD-U50E USB cable is also available. For details, consult your dealer.

⑨ **(detach) button**
Press to remove the front panel from the head unit.

⑩ **AUX input jack (3.5 mm stereo jack)**
Use to connect an auxiliary device.

⑪ **CLOCK/DISP OFF button**
Press to change to the clock display.
Press and hold to turn the display indication and button illumination off or on.

⑫ **(repeat)/LOC button**
Press to switch the repeat play range while using CD, USB/SD or iPod.
Press to switch local settings while using tuner as the source.

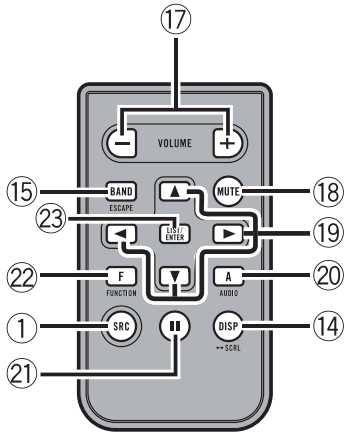
⑬ **(random)/iPod button**
Press to turn random function on or off while using CD or USB/SD.
While using an iPod, press to shuffle all tracks.
Press and hold to switch the control mode while using an iPod.
For details, refer to Operating this unit's iPod function from your iPod.

⑭ **DISP/BACK/SCRL button**
Press to select different displays.
Press and hold to scroll through the text information.
Press to return to the previous display when operating the menu.
Press and hold to return to the main menu when operating the menu.

⑮ **BAND/ESC button**
Press to select among three FM bands and one AM band.
Press to return to the ordinary display when operating the menu.

Remote control

Operation is the same as when using the buttons on the head unit.



⑰ **VOLUME buttons**
Press to increase or decrease the volume.

⑱ **MUTE button**
Press to turn off the sound. To turn on the sound, press again.

⑲ **▲/▼/◄/► buttons**
Press to perform manual seek tuning, fast forward, reverse and track search controls.
Also used for controlling functions.

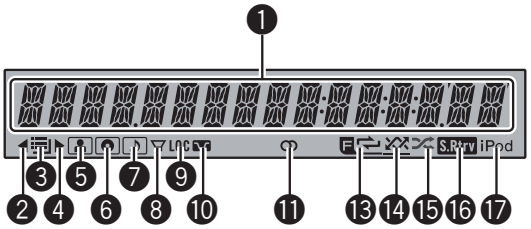
⑳ **AUDIO button**
Press to select an audio function.

㉑ **II button**
Press to turn pause on or off.

㉒ **FUNCTION button**
Press to select functions.

㉓ **LIST/ENTER button**
Press to display the disc title list, track title list, folder list, file list or preset channel list depending on the source.
While in the operating menu, press to control functions.

Display indication



❶ **Main display section**
Displays band, frequency, elapsed playback time and other settings.
- Tuner
  Band and frequency are displayed.
- Built-in CD player, external storage device (USB), iPod
  Elapsed playback time and literal information are displayed.

❷ **◄ indicator**
Appears when an upper tier of folder or menu exists.

❸ **(list) indicator**
Appears when operating list function.

❹ **► indicator**
Appears when a lower tier of folder or menu exists.

❺ **(artist) indicator**
Appears when the disc (track) artist name is displayed on the main display section.
Appears when artist search refinement on the iPod browsing function is in use.

❻ **(disc) indicator**
Appears when the disc (album) name is displayed on the main display section.
Appears when album search refinement on the iPod browsing function is in use.

❼ **(song) indicator**
Appears when the track (song) name is displayed on the main display section.
Appears when song search refinement on the iPod browsing function is in use.

❽ **(subwoofer) indicator**
Appears when subwoofer is on.

❾ **LOC indicator**
Appears when local seek tuning is on.

❿ **(loudness) indicator**
Appears when loudness is on.

⓫ **(stereo) indicator**
Appears when the selected frequency is being broadcast in stereo.

⓬ **(folder repeat) indicator**
Appears when folder repeat is on.
When repeat function is on, only is displayed.

⓮ **(folder random) indicator**
Appears when folder random is on.
When random function is on, only is displayed.

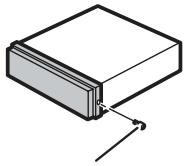
⓯ **(shuffle) indicator**
Appears when shuffle function is on while iPod source is being selected.

⓰ **S.Rtrv indicator**
Appears when Sound Retriever function is on.
For details, refer to Using Sound Retriever.

⓱ **iPod indicator**
Appears when **CONTROL**(control mode) is set to **IPOD**.
For details about the control mode, refer to Operating this unit's iPod function from your iPod. ■

Fastening the front panel

If you do not plan to detach the front panel, the front panel can be fastened with supplied screw.



Screw

Screw Parts No.

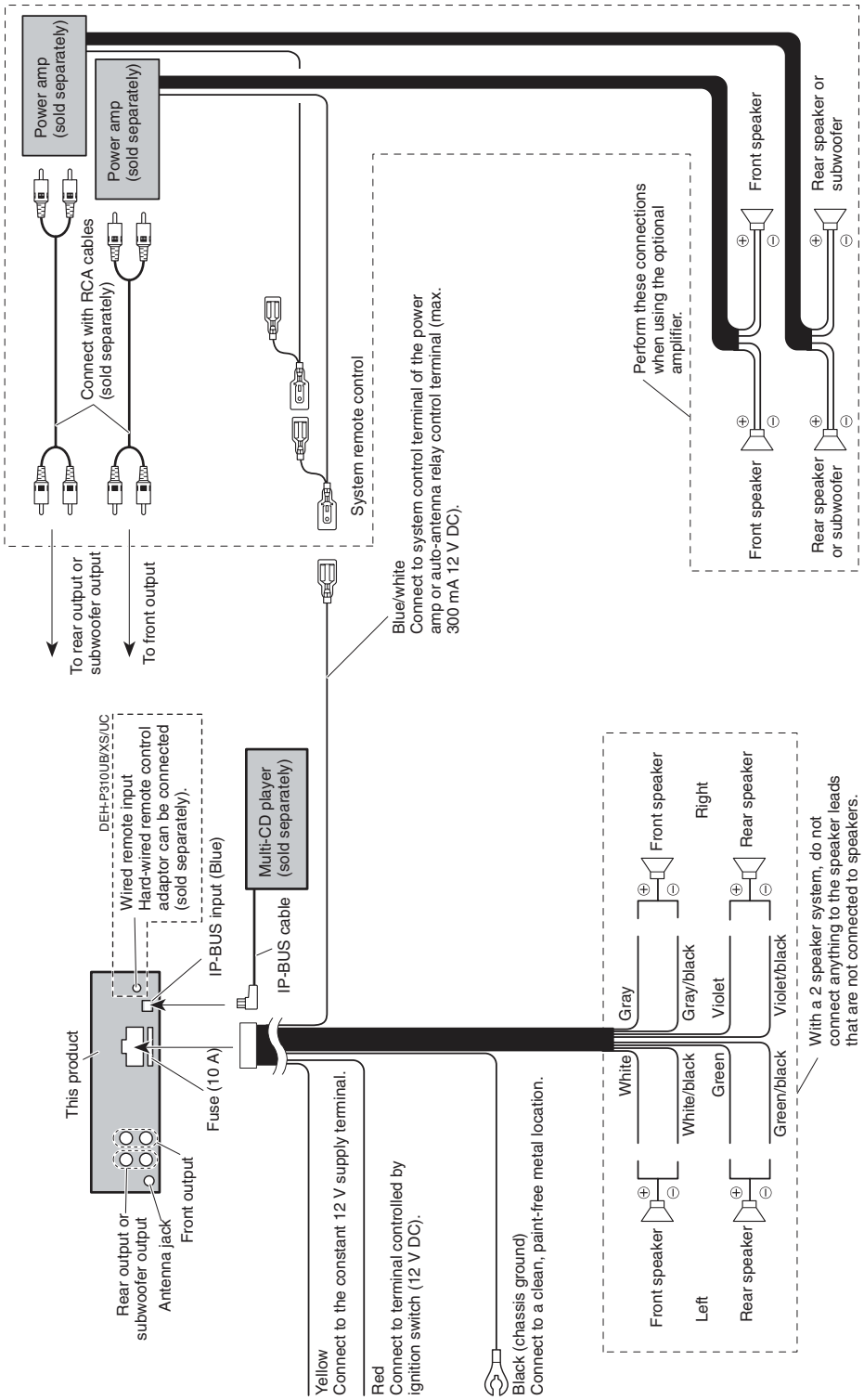
DEH-P310UB/XS/UC DEH-P3100UB/XS/UC	BPZ20P060FTC
DEH-P3100UB/XS/EW5	BPZ20P080FTC
DEH-3100UB/XS/ES	CXX2204 (Service)

■

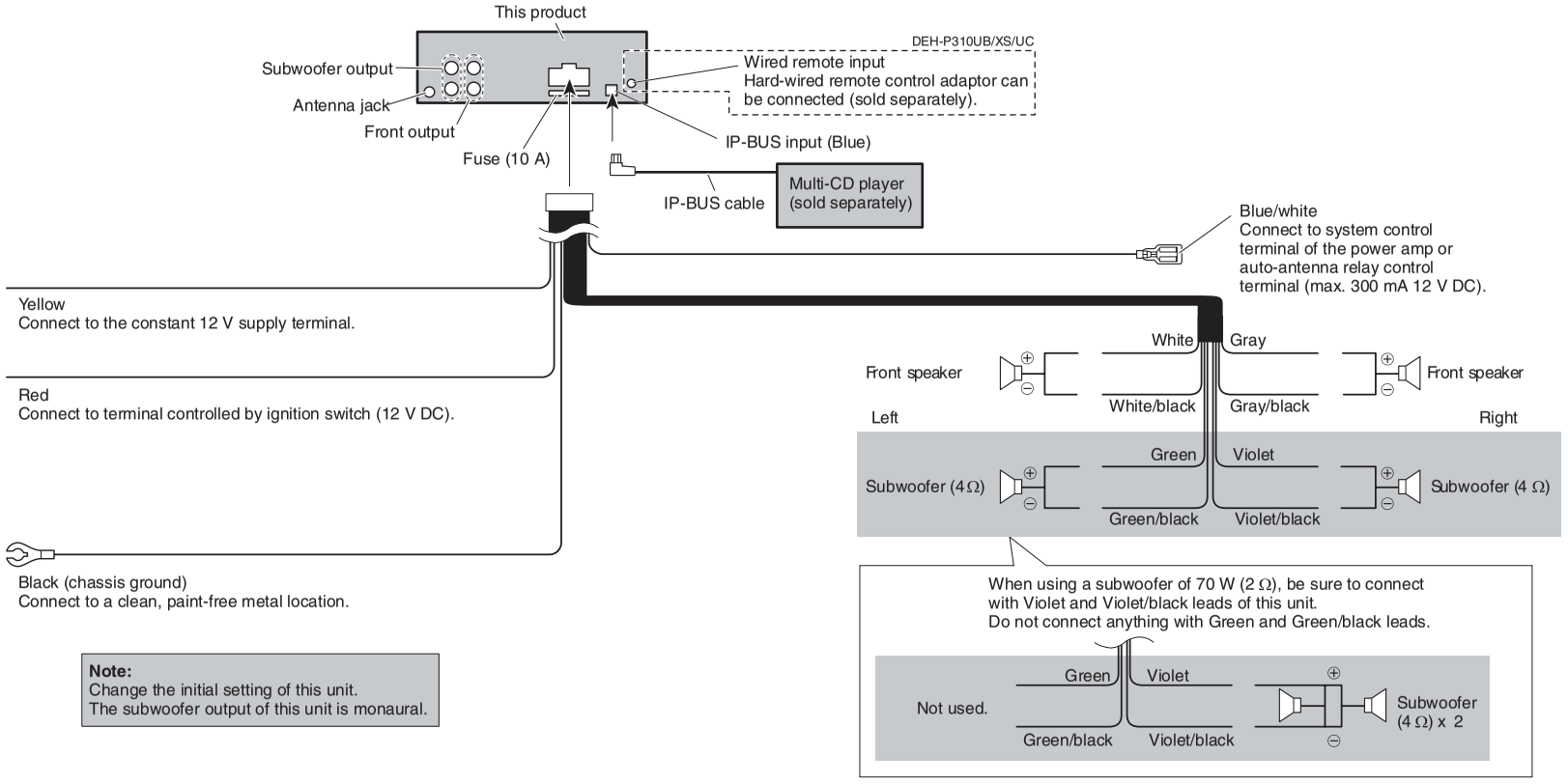
2.4 CONNECTION DIAGRAM

DEH-P310UB/XS/UC, DEH-P3100UB/XS/UC

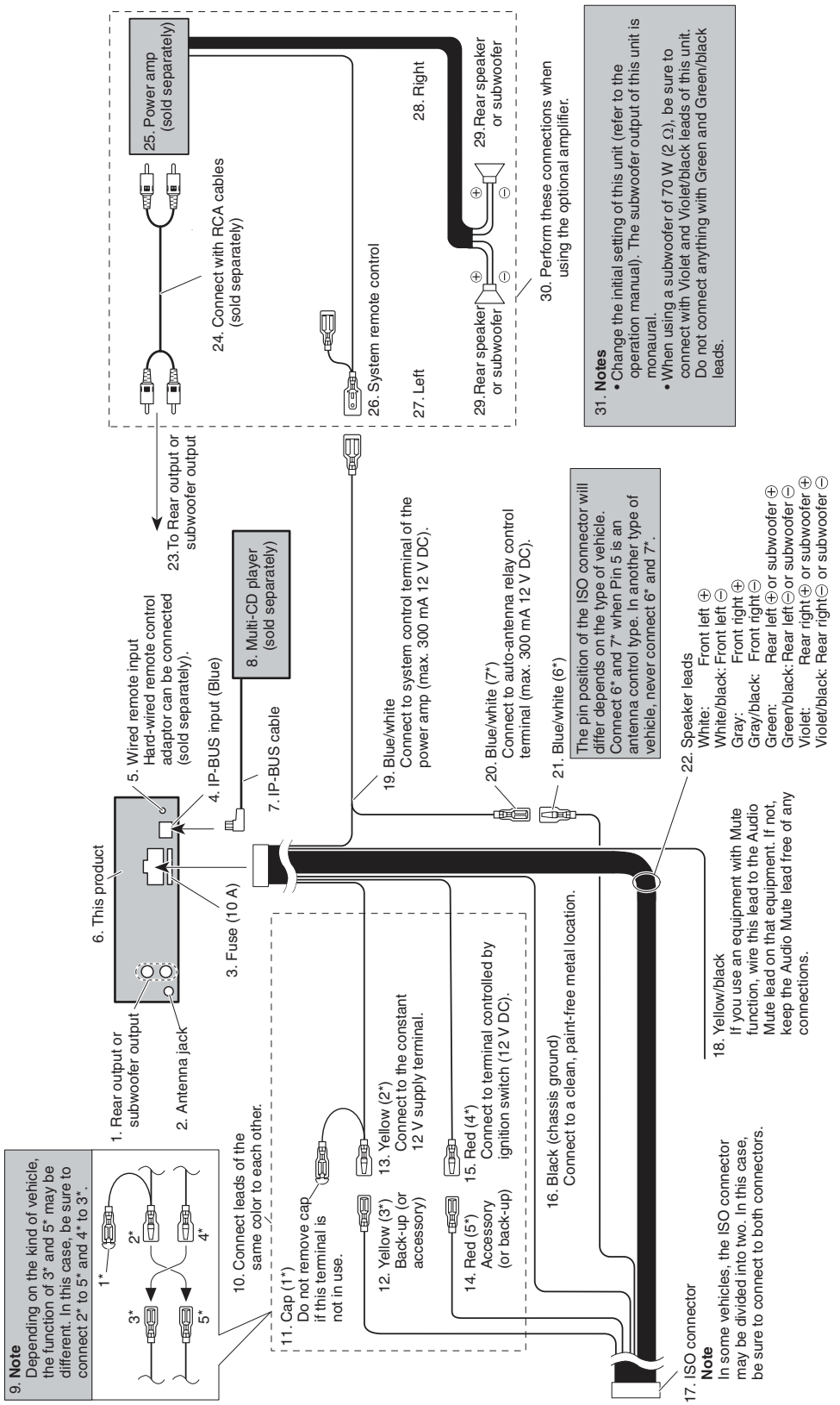
When not connecting a rear speaker lead to a subwoofer

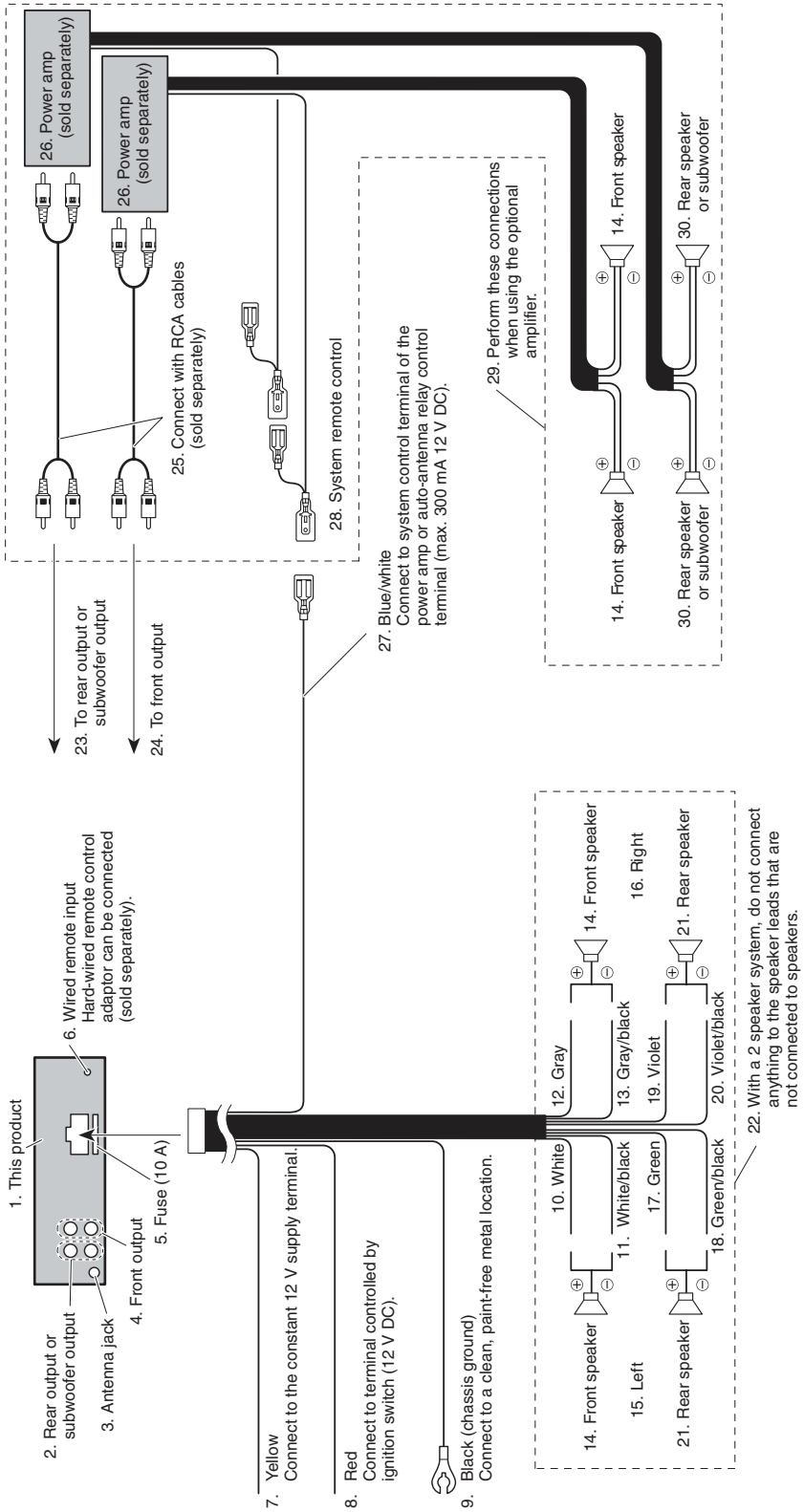


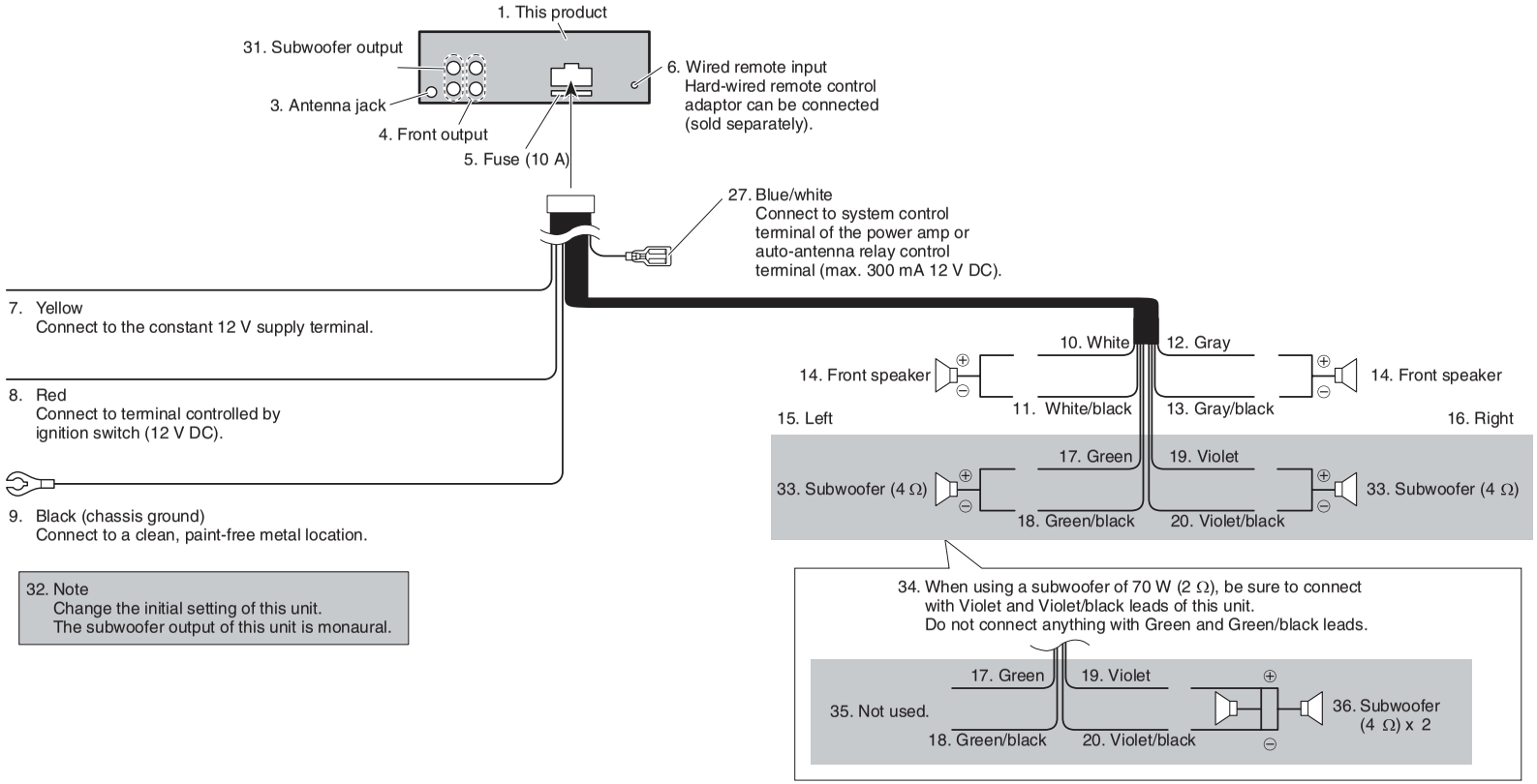
When using a subwoofer without using the optional amplifier



Note:
Change the initial setting of this unit.
The subwoofer output of this unit is monaural.


25. Power amp (sold separately)
24. Connect with RCA cables (sold separately)
26. System remote control
28. Right
27. Left
29. Rear speaker or subwoofer
29. Rear speaker or subwoofer
30. Perform these connections when using the optional amplifier.
31. Notes
• Change the initial setting of this unit (refer to the operation manual). The subwoofer output of this unit is monaural.
• When using a subwoofer of 70 W (2 Ω), be sure to connect with Violet and Violet/black leads of this unit. Do not connect anything with Green and Green/black leads.
23. To Rear output or subwoofer output
8. Multi-CD player (sold separately)
5. Wired remote input Hard-wired remote control adaptor can be connected (sold separately).
4. IP-BUS input (Blue)
7. IP-BUS cable
19. Blue/white Connect to system control terminal of the power amp (max. 300 mA 12 V DC).
20. Blue/white (7*) Connect to auto-antenna relay control terminal (max. 300 mA 12 V DC).
21. Blue/white (6*)
The pin position of the ISO connector will differ depends on the type of vehicle. Connect 6* and 7* when Pin 5 is an antenna control type. In another type of vehicle, never connect 6* and 7*.
22. Speaker leads
White: Front left ⊕
White/black: Front left ⊖
Gray: Front right ⊕
Gray/black: Front right ⊖
Green: Rear left ⊕ or subwoofer ⊕
Green/black: Rear left ⊖ or subwoofer ⊖
Violet: Rear right ⊕ or subwoofer ⊕
Violet/black: Rear right ⊖ or subwoofer ⊖
6. This product
3. Fuse (10 A)
1. Rear output or subwoofer output
2. Antenna jack
10. Connect leads of the same color to each other.
11. Cap (1*) Do not remove cap if this terminal is not in use.
12. Yellow (3*) Back-up (or accessory)
13. Yellow (2*) Connect to the constant 12 V supply terminal.
14. Red (5*) Accessory (or back-up)
15. Red (4*) Connect to terminal controlled by ignition switch (12 V DC).
16. Black (chassis ground) Connect to a clean, paint-free metal location.
17. ISO connector
Note
In some vehicles, the ISO connector may be divided into two. In this case, be sure to connect to both connectors.
18. Yellow/black
If you use an equipment with Mute function, wire this lead to the Audio Mute lead on that equipment. If not, keep the Audio Mute lead free of any connections.
9. Note
Depending on the kind of vehicle, the function of 3* and 5* may be different. In this case, be sure to connect 2* to 5* and 4* to 3*.
1*
2*
3*
4*
5*


26. Power amp (sold separately)
26. Power amp (sold separately)
25. Connect with RCA cables (sold separately)
28. System remote control
29. Perform these connections when using the optional amplifier.
14. Front speaker
30. Rear speaker or subwoofer
14. Front speaker
30. Rear speaker or subwoofer
27. Blue/white
Connect to system control terminal of the power amp or auto-antenna relay control terminal (max. 300 mA 12 V DC).
23. To rear output or subwoofer output
24. To front output
1. This product
6. Wired remote input
Hard-wired remote control adaptor can be connected (sold separately).
2. Rear output or subwoofer output
3. Antenna jack
4. Front output
5. Fuse (10 A)
7. Yellow
Connect to the constant 12 V supply terminal.
8. Red
Connect to terminal controlled by ignition switch (12 V DC).
9. Black (chassis ground)
Connect to a clean, paint-free metal location.
12. Gray
13. Gray/black
19. Violet
20. Violet/black
14. Front speaker
16. Right
21. Rear speaker
22. With a 2 speaker system, do not connect anything to the speaker leads that are not connected to speakers.
10. White
11. White/black
17. Green
18. Green/black
14. Front speaker
15. Left
21. Rear speaker


1. This product
31. Subwoofer output
3. Antenna jack
4. Front output
5. Fuse (10 A)
6. Wired remote input
Hard-wired remote control adaptor can be connected (sold separately).
27. Blue/white
Connect to system control terminal of the power amp or auto-antenna relay control terminal (max. 300 mA 12 V DC).
7. Yellow
Connect to the constant 12 V supply terminal.
8. Red
Connect to terminal controlled by ignition switch (12 V DC).
9. Black (chassis ground)
Connect to a clean, paint-free metal location.
10. White
12. Gray
14. Front speaker
11. White/black
13. Gray/black
14. Front speaker
15. Left
16. Right
17. Green
19. Violet
33. Subwoofer (4 Ω)
18. Green/black
20. Violet/black
33. Subwoofer (4 Ω)
34. When using a subwoofer of 70 W (2 Ω), be sure to connect with Violet and Violet/black leads of this unit.
Do not connect anything with Green and Green/black leads.
17. Green
19. Violet
35. Not used.
18. Green/black
20. Violet/black
36. Subwoofer (4 Ω) x 2

32. Note
Change the initial setting of this unit.
The subwoofer output of this unit is monaural.

3. BASIC ITEMS FOR SERVICE

3.1 CHECK POINTS AFTER SERVICING

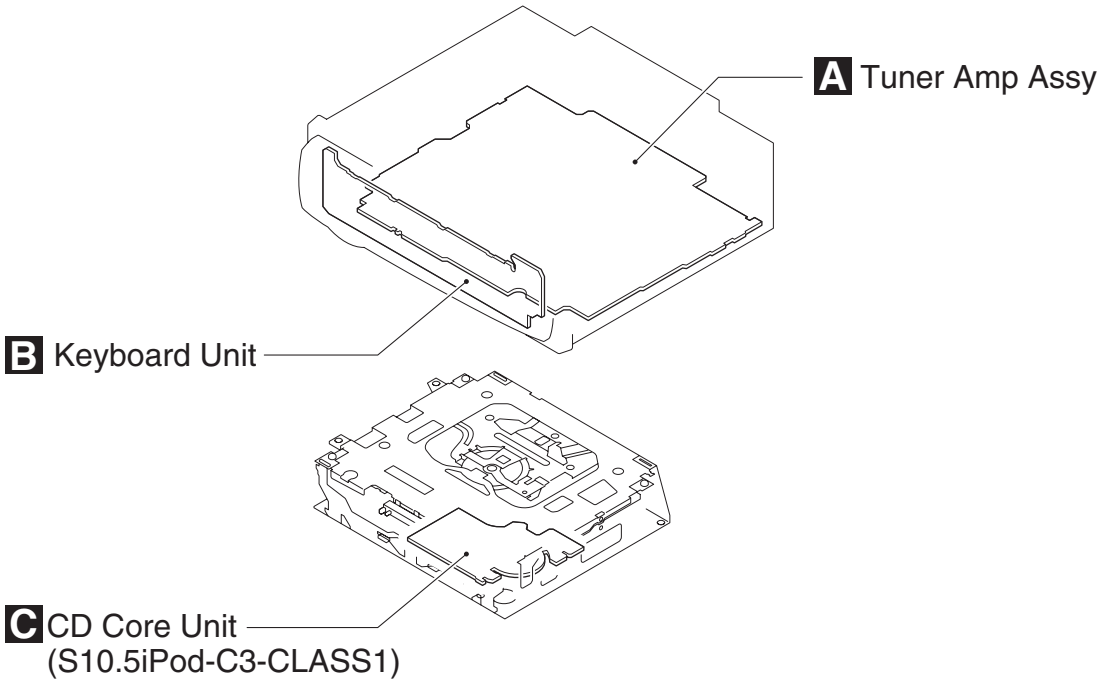
To keep the product quality after servicing, please confirm following check points.

No.		Procedures	Item to be confirmed
1		Confirm whether the customer complain has been solved. If the customer complain occurs with the specific media, use it for the operation check.	The customer complain must not be reappeared. Display, audio and operations must be normal.
2	CD	Play back a CD. (Track search)	No malfunction on display, audio and operation.
3	FM/AM tuner	Check FM/AM tuner action. (Seek, Preset) Switch band to check both FM and AM.	Display, audio and operations must be normal.
4		Check whether no disc is inside the product.	The media used for the operating check must be ejected.
5		Appearance check	No scratches or dirt on its appearance after receiving it for service.

See the table below for the items to be checked regarding audio:

Item to be checked regarding audio
Distortion
Noise
Volume too low
Volume too high
Volume fluctuating
Sound interrupted

3.2 PCB LOCATIONS



A:DEH-P310UB/XS/UC
B:DEH-P3100UB/XS/UC
C:DEH-P3100UB/XS/EW
D:DEH-3100UB/XS/ES

Unit Number	:	YWM5360(A)
Unit Number	:	YWM5361(B)
Unit Number	:	YWM5359(C)
Unit Number	:	YWM5362(D)
Unit Name	:	Tuner Amp Assy
Unit Number	:	(A)
Unit Number	:	(B)
Unit Number	:	(C)
Unit Number	:	(D)
Unit Name	:	Keyboard Unit
Unit Number	:	CWX3727
Unit Name	:	CD Core Unit(S10.5iPod-C3-CLASS1)

3.3 JIGS LIST

● **Jigs List**

Name	Jig No.	Remarks
Test Disc	TCD-782	Checking the grating
L.P.F.		Checking the grating (Two pieces)

● **Grease List**

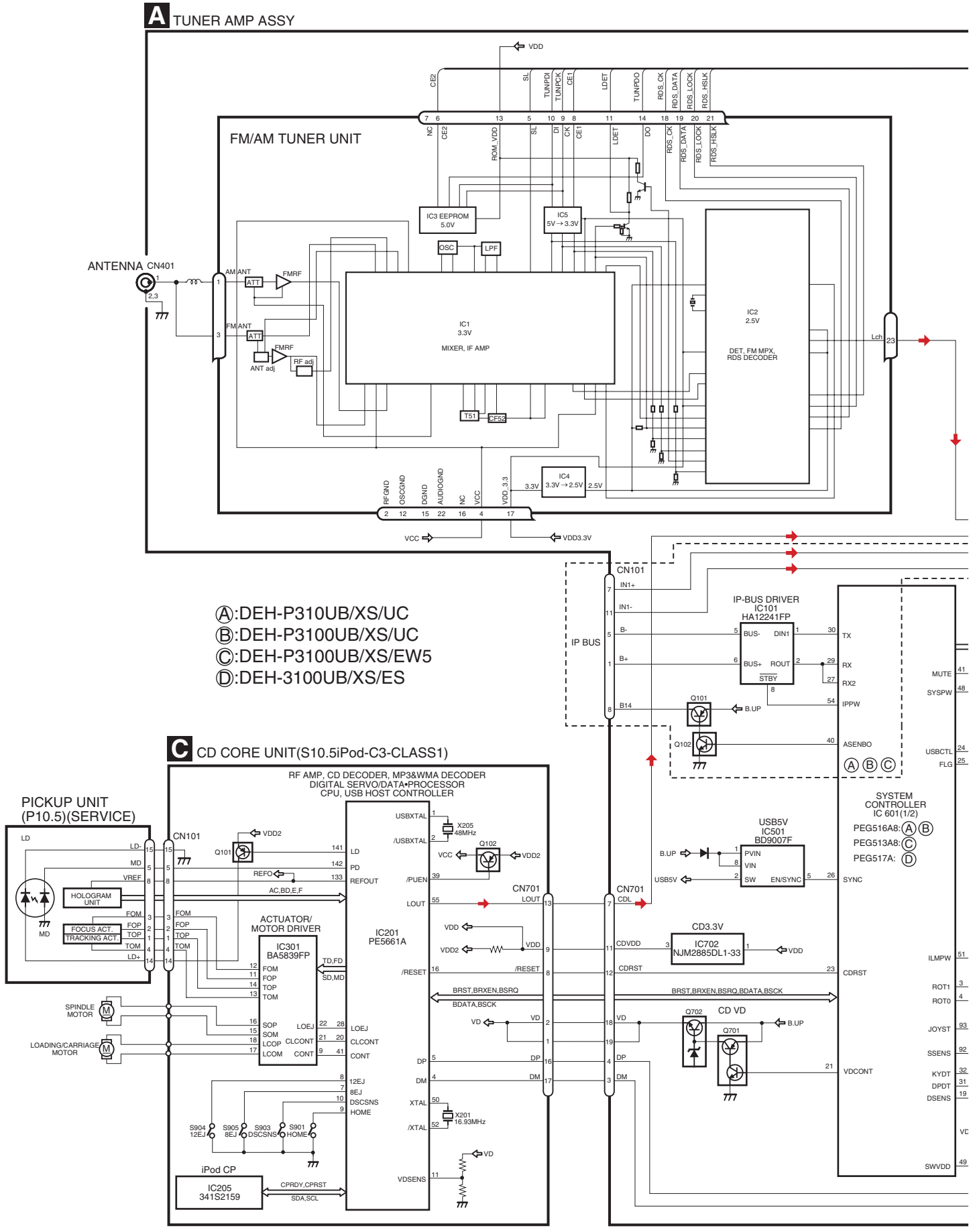
Name	Grease No.	Remarks
Grease	GEM1024	CD Mechanism Module
Grease	GEM1045	CD Mechanism Module

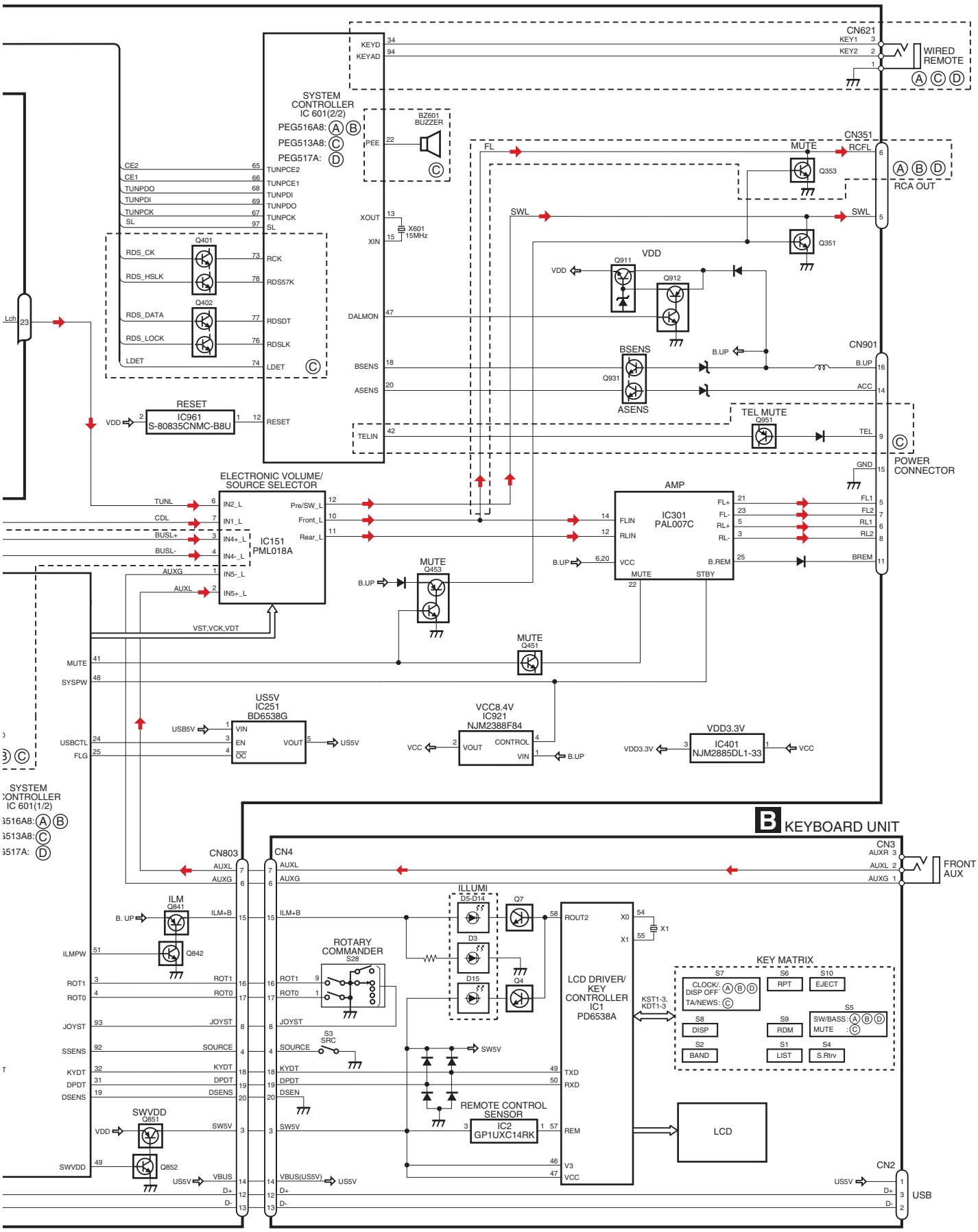
3.4 CLEANING

Before shipping out the product, be sure to clean the following portions by using the prescribed cleaning tools:

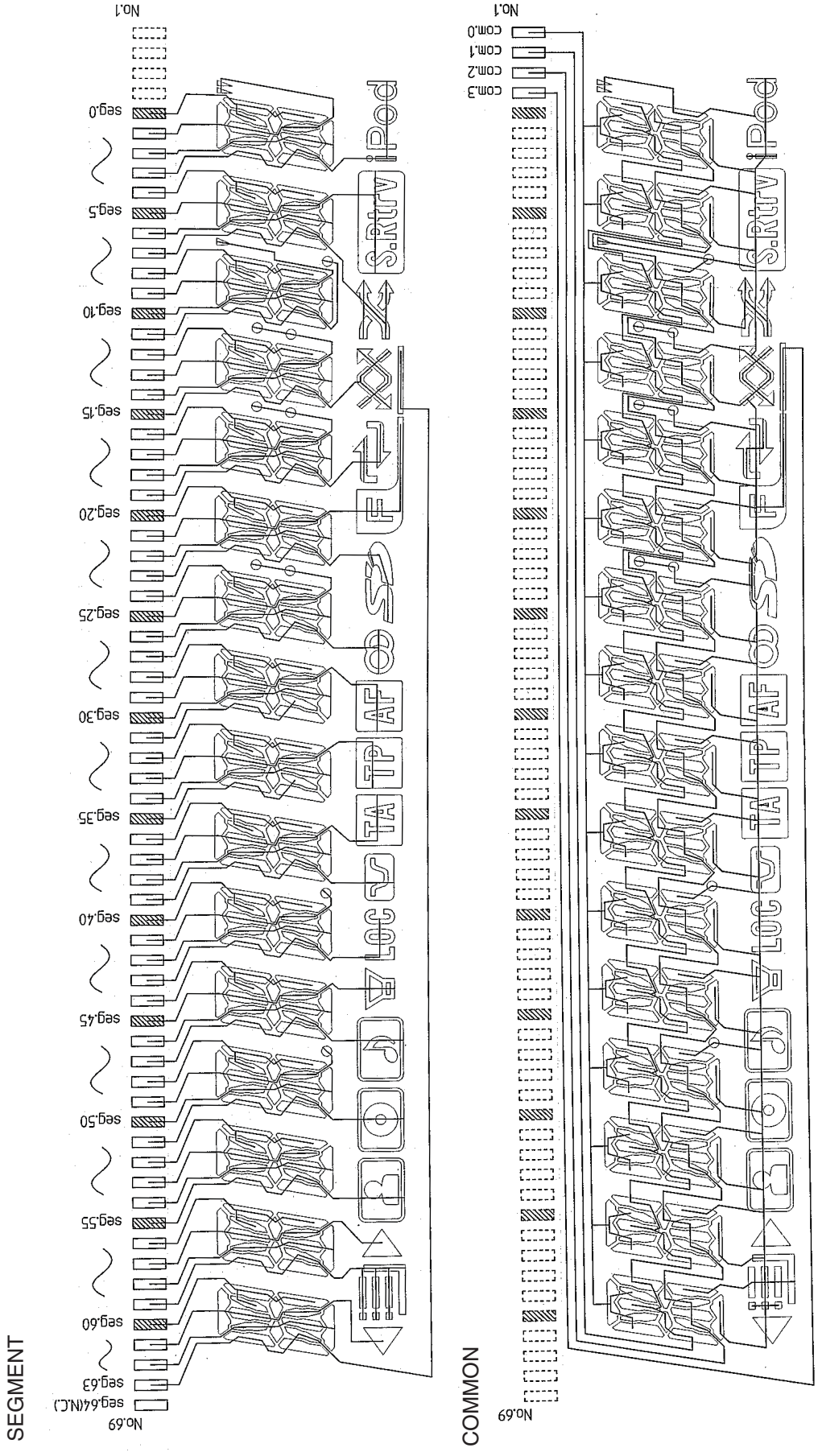
Portions to be cleaned	Cleaning tools
CD pickup lenses	Cleaning liquid : GEM1004 Cleaning paper : GED-008

4. BLOCK DIAGRAM

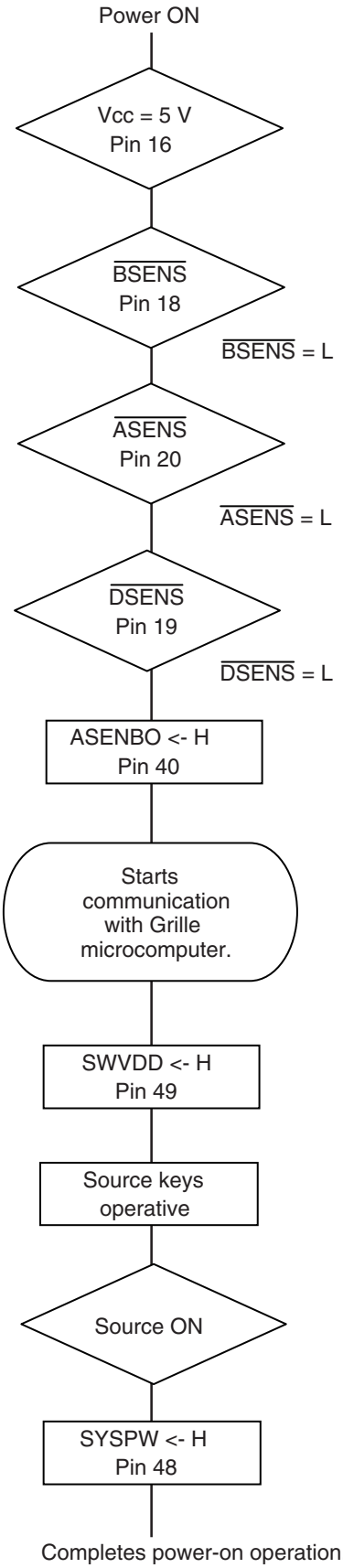



CN621
KEY1
KEY2
WIRED REMOTE
SYSTEM CONTROLLER IC 601(2/2)
PEG516A8: A B
PEG513A8: C
PEG517A: D
KEYD
KEYAD
BZ601 BUZZER
PEE
CE2
CE1
TUNPDO
TUNPDI
TUNPCK
SL
TUNPCE2
TUNPCE1
TUNPDI
TUNPDO
TUNPCK
SL
XOUT
XIN
X601 15MHz
CN351
RCFL
RCA OUT
MUTE
Q353
FL
SWL
Q351
VDD
Q911
Q912
Q401
RDS_CK
RDS_HSLK
RDS_DATA
RDS_LOCK
LDET
RCK
RDS57K
RDSDT
RDSLK
LDET
Q402
DALMON
BSENS
ASENS
Q931
B.UP
CN901
ACC
TEL MUTE
Q951
TEL
POWER CONNECTOR
GND
RESET
IC961
S-80835CNMC-B8U
VDD
RESET
ELECTRONIC VOLUME/ SOURCE SELECTOR
IC151
PML018A
TUNL
CDL
BUSL+
BUSL-
AUXG
AUXL
VST,VCK,VDT
Pre/SW_L
Front_L
Rear_L
AMP
IC301
PAL007C
FLIN
RLIN
VCC
MUTE
STBY
B.REM
FL+
FL-
RL+
RL-
FL1
FL2
RL1
RL2
BREM
MUTE
Q453
MUTE
Q451
SYSPW
USBCTL
FLG
US5V
IC251
BD6538G
USB5V
VIN
EN
OC
VOUT
VCC8.4V
IC921
NJM2388F84
CONTROL
VOUT
VIN
VDD3.3V
IC401
NJM2885DL1-33
SYSTEM CONTROLLER IC 601(1/2)
B KEYBOARD UNIT
CN803
CN4
CN3
AUXR
AUXL
AUXG
FRONT AUX
ILM
Q841
Q842
ILMPW
ILM+B
ILLUMI
D5-D14
D3
D15
Q7
Q4
ROTARY COMMANDER
S28
ROT1
ROT0
JOYST
SOURCE
S3 SRC
KYDT
DPDT
DSENS
DSEN
SW5V
SWVDD
Q851
Q852
REMOTE CONTROL SENSOR
IC2
GP1UXC14RK
LCD DRIVER/ KEY CONTROLLER IC1
PD6538A
ROUT2
X0
X1
KST1-3, KDT1-3
TXD
RXD
REM
V3
VCC
KEY MATRIX
S7
CLOCK/ DISP OFF
TA/NEWS: C
S6
RPT
S10
EJECT
S8
DISP
S9
RDM
S5
SW/BASS: A B D
MUTE : C
S2
BAND
S1
LIST
S4
S.Rtrv
LCD
CN2
USB
VBUS
VBUS(US5V)
D+
D-

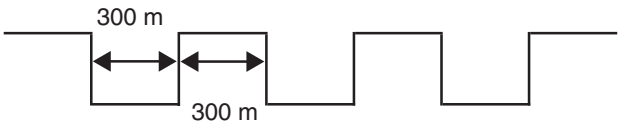
LCD (YAW5101)


SEGMENT
No.1
seg.0
seg.5
seg.10
seg.15
seg.20
seg.25
seg.30
seg.35
seg.40
seg.45
seg.50
seg.55
seg.60
seg.63
seg.64(N.C.)
No.69
COMMON
No.1
com.0
com.1
com.2
com.3
No.69
S.Rtrv
iPod
TA
TP
AF
Loc

5. DIAGNOSIS
5.1 OPERATIONAL FLOWCHART



Completes power-on operation.
(After that, proceed to each source operation)



In case of the above signal, the communication with Grille microcomputer may fail.
If the time interval is not 300 msec, the oscillator may be defective.

5.2 ERROR CODE LIST

● Error Messages

If a CD is not operative or stopped during operation due to an error, the error mode is turned on and cause(s) of the error is indicated with a corresponding number. This arrangement is intended at reducing nonsense calls from the users and also for facilitating trouble analysis and repair work in servicing.

(1) Basic Indication Method

1) When SERRORM is selected for the CSMOD (CD mode area for the system), error codes are written to DMIN (minutes display area) and DSEC (seconds display area). The same data is written to DMIN and DSEC. DTNO remains in blank as before.

2) Head unit display examples

Depending on display capability of LCD used, display will vary as shown below. xx contains the error number.

8-digit display	6-digit display	4-digit display
ERROR-xx	ERR-xx	E-xx

(2) Error Code List

Code	Class	Displayed error code	Description of the code and potential cause(s)
10	Electricity	Carriage Home NG SERVO LSI Communication Error	CRG can't be moved to inner diameter. CRG can't be moved from inner diameter. -> Failure on home switch or CRG move mechanism. Communication error between microcomputer and SERVO LSI.
11	Electricity	Focus Servo NG	Focusing not available. -> Stains on rear side of disc or excessive vibrations on REWRITABLE.
12	Electricity	Spindle Lock NG Subcode NG	Spindle not locked. Sub-code is strange (not readable). -> Failure on spindle, stains or damages on disc, or excessive vibrations. A disc not containing CD-R data is found. Turned over disc are found, though rarely. CD signal error.
17	Electricity	Setup NG	AGC protection doesn't work. Focus can be easily lost. -> Damages or stains on disc, or excessive vibrations on REWRITABLE.
30	Electricity	Search Time Out	Failed to reach target address. -> CRG tracking error or damages on disc.
44	Electricity	ALL Skip	Skip setting for all track. (CD-R/RW)
50	Mechanism	CD On Mech Error	Mechanical error during CD ON. -> Defective loading motor, mechanical lock and mechanical sensor.
A0	System	Power Supply NG	Power (VD) is ground faulted. -> Failure on SW transistor or power supply (failure on connector).

Remarks: Mechanical errors are not displayed (because a CD is turned off in these errors).

Unreadable TOC does not constitute an error. An intended operation continues in this case.

Upper digits of an error code are subdivided as shown below:

1x: Setup relevant errors, 3x: Search relevant errors, Ax: Other errors.

USB storage device

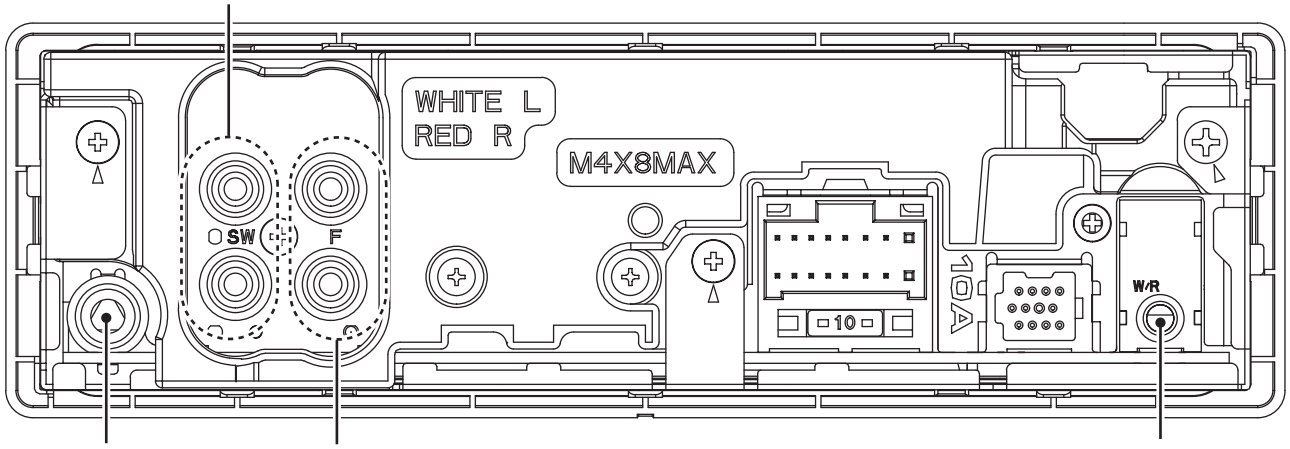
Message	Cause	Action
NO AUDIO	No songs	Transfer the audio files to the external storage device and connect.
	USB memory with security enabled is connected	Follow the USB memory instructions to disable the security.
NO DEVICE	The USB storage device or iPod is not connected to the USB port of this unit.	Connect a compatible USB storage device.
TRK SKIPPED	The connected USB storage device contains WMA files that are protected by Windows Media™ DRM 9/10	Play an audio file not protected by Windows Media DRM 9/10.
PROTECT	All the files in the USB storage device are protected by Windows Media DRM 9/10	Transfer audio files not protected by Windows Media DRM 9/10 to the USB storage device and connect.
N/A USB	The USB storage device connected to is not supported by this unit.	Connect a USB storage device that is USB Mass Storage Class compliant.
CHECK USB	The USB connector or USB cable is short-circuited.	Confirm that the USB connector or USB cable is not caught in something or damaged.
	The connected USB storage device consumes more than 500 mA (maximum allowable current).	Disconnect the USB storage device and do not use it. Turn the ignition switch to OFF, then to ACC or ON and then connect the compliant USB storage device.
ERROR-19	Communication failure	Perform one of the following operations. –Turn the ignition switch OFF and back ON. –Disconnect or eject the USB storage device. –Change to a different source. Then, return to the USB source.
ERROR-23	USB storage device is not formatted with FAT16 or FAT32	USB storage device should be formatted with FAT16 or FAT32.

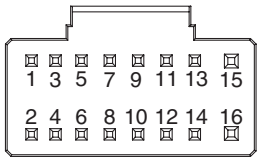
iPod

Message	Cause	Action
ERROR-19	Communication failure	Disconnect the cable from iPod. Once iPod main menu is displayed, connect the cable again. Reset the iPod.
	iPod failure	Disconnect the cable from iPod. Once iPod main menu is displayed, connect the cable again. Reset the iPod.
N/A USB	Old version of iPod	Update the iPod version.
	iPod failure	Reset the iPod.
ERROR-16	Old version of iPod	Update the iPod version.
	iPod failure	Disconnect the cable from iPod. Once iPod main menu is displayed, connect the cable again. Reset the iPod.
ERROR-A1 **CHECK USB**	iPod is not charged but operates correctly	Check if the connection cable for iPod shorted out (e.g., not caught in metal objects). After checking, turn the ignition switch OFF and back ON or disconnect the iPod and connect again.
NO SONGS	No songs	Transfer the songs to iPod.
STOP	No songs in the current list	Select a list that contains the songs.
NO DEVICE	The USB storage device or iPod is not connected to the USB port of this unit.	Connect a compatible iPod.

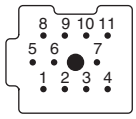
■

5.3 CONNECTOR FUNCTION DESCRIPTION





1. FR+
2. RR+
3. FR-
4. RR-
5. FL+
6. RL+
7. FL-
8. RL-
9. TEL
10. NC
11. BREM
12. NC
13. A.ANT
14. ACC
15. GND
16. BUP



1. BUS1
2. GND
3. GND
4. NC
5. BUS2
6. GND
7. BUSL1
8. ASENB1
9. BUSR1
10. BUSR2
11. BUSL2

6. SERVICE MODE
6.1 DISPLAY TEST MODE

To enter the test mode

During pressing the "DISP" and "SW(MUTE)" keys simultaneously, perform the reset-start, then turn ON the Source to enter the Display test mode.

DISP + SW(MUTE)

Operation method

Display test mode	Key
System version display (*1)	
↓	DISP + SW(MUTE)
ROM Correction version display (*2)	
↓	DISP + SW(MUTE)
Normal display	
↓	DISP + SW(MUTE)
Display stop	
↓	DISP + SW(MUTE)
All lighting of display	
↓	DISP + SW(MUTE)
All lights out of display	
↓	DISP + SW(MUTE)
LCD check mode 1 (*3)	
↓	DISP + SW(MUTE)
LCD check mode 2 (*4)	
↓	DISP + SW(MUTE)
LCD check mode 3 (*5)	
↓	DISP + SW(MUTE)
Return to top	

*1) System version display:

When System version display, the PD number, the system microcomputer version and the CWW number is displayed.

Example) For PEG123A, VER1.02, CWW1111

		1	2	3	A		1	0	2		C	1	1	1	1

*2) ROM Correction version display:

Normally read:

V	E	R	/	C	H		H	1	2	3	/	CH1	CH2	CH3	CH4

Caution:

H123 : ROM Correction Ver.Info

CH1 - CH4 : Usage condition of ROM Correction CH (using:X / Not used:0)

When ROM Correction itself didn't exist:

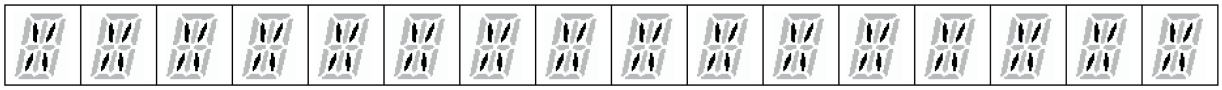
N	O		E	E	P	R	O	M							

When check sum is a disagreement:

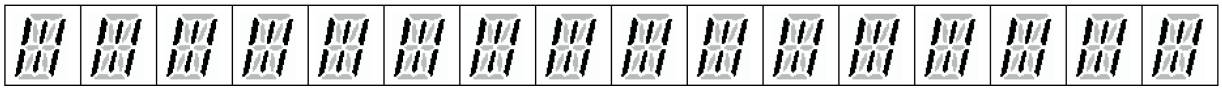
S	U	M		E	R	R	O	R							

*3) LCD check mode 1

*4) LCD check mode 2



*5) LCD check mode 3



6.2 CD TEST MODE

During pressing the "BAND" and "S.Rtrv" keys simultaneously, perform the reset-start, then turn ON the CD to enter the CDS test mode.

BAND + S.Rtrv

How to issue the 1 - 6 keys in the slave test:

The specification of the model does not include the 1 - 6 keys issuance function for H/U and the remote control unit. Therefore, in order to issue commands in a slave test, use the direct FUNCTION keys alternatively to enable the equal key command sending function to the existing models.

Outline) Use the direct FUNCTION keys to display, select, or issue the KEY 1 - 6.

<Direct FUNCTION keys and corresponding functions>

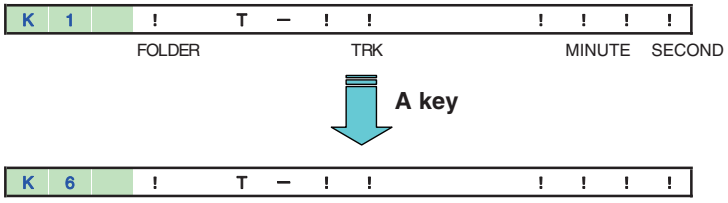
Direct FUNCTION key	Key	Normal mode	Slave test mode
S.Rtrv/SAT	A	S.Rtrv/FUNC1	Issuing a key command
RDM/SHFL	B	RDM/SHFL/FUNC2	Issuing a key command
RPT/LOCAL	C	LOCAL/RPT/FUNC3	Switching a screen

*) For convenience, a name of each direct FUNCTION key is shown as "A", "B", and "C".

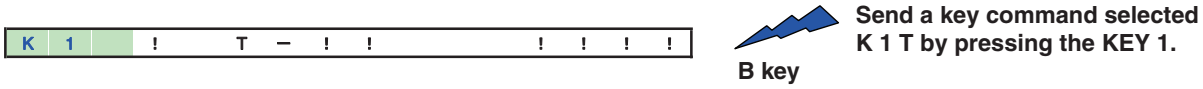
How to issue the 1 - 6 keys for the CDS source:

(The ▭ areas below are overwritten and displayed on character strings for the normal mode display.)

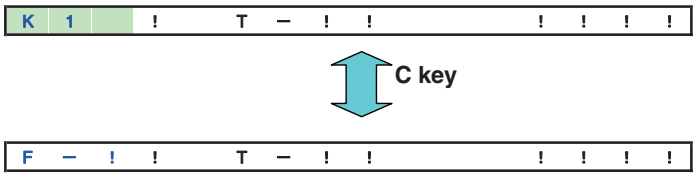
① During the slave test mode, the key name "K1" is shown at the left by default.
In this condition, press the A key to toggle K1 - K6, and select a command to be sent to the slave.



② During the K1 - K6 key names are displayed, press the B key and issue the selected command.

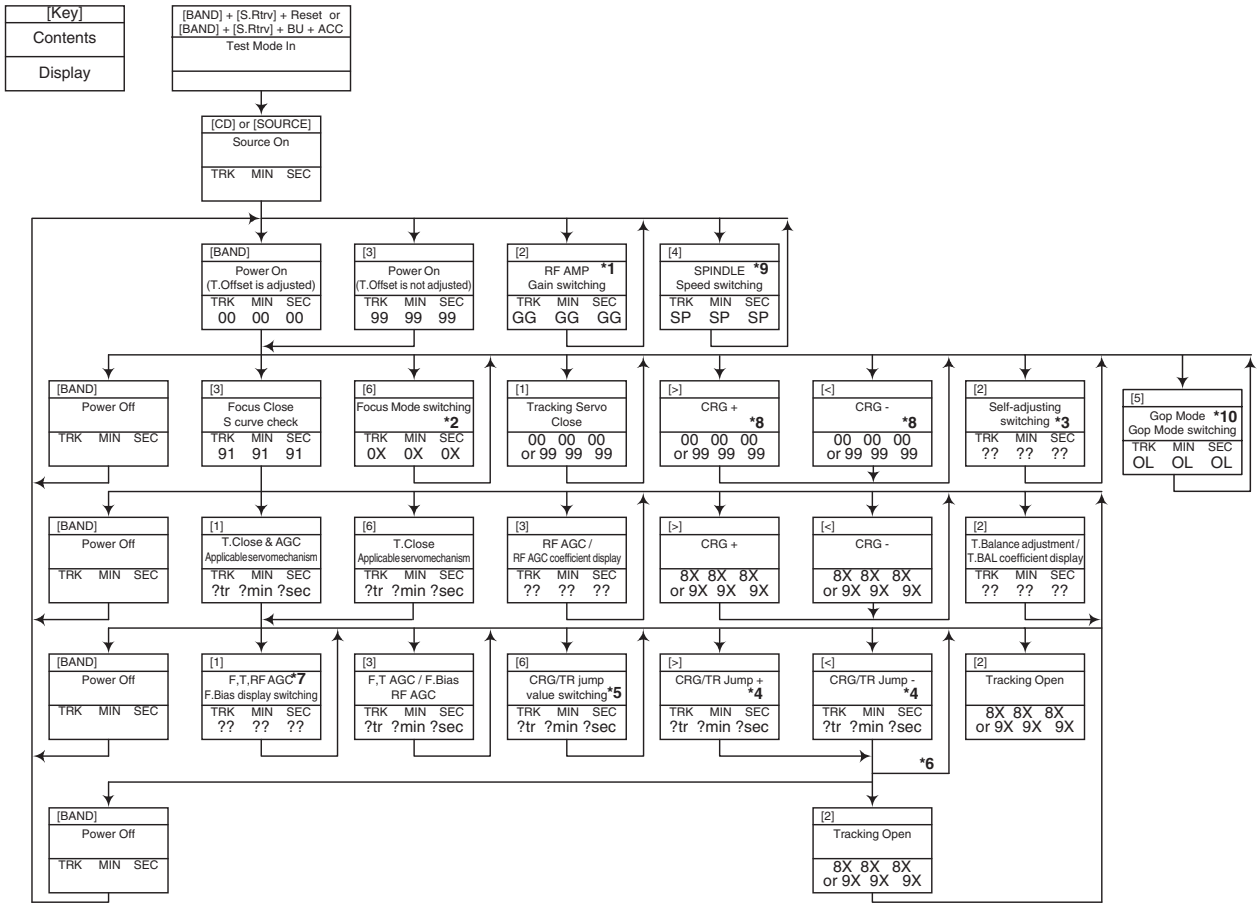


③ Press the C key to change display/non-display of key names.
When the non-display mode is selected for the K1 - K6 key names, "A key" and "B key" are invalid.



*) Pressing the A key or B key does not work.

● Flow Chart


[Key]
Contents
Display
[BAND] + [S.Rtrv] + Reset or [BAND] + [S.Rtrv] + BU + ACC
Test Mode In
[CD] or [SOURCE]
Source On
TRK MIN SEC
[BAND] Power On (T.Offset is adjusted) TRK MIN SEC 00 00 00
[3] Power On (T.Offset is not adjusted) TRK MIN SEC 99 99 99
[2] RF AMP *1 Gain switching TRK MIN SEC GG GG GG
[4] SPINDLE *9 Speed switching TRK MIN SEC SP SP SP
[BAND] Power Off TRK MIN SEC
[3] Focus Close S curve check TRK MIN SEC 91 91 91
[6] Focus Mode switching *2 TRK MIN SEC 0X 0X 0X
[1] Tracking Servo Close 00 00 00 or 99 99 99
[>] CRG + *8 00 00 00 or 99 99 99
[<] CRG - *8 00 00 00 or 99 99 99
[2] Self-adjusting switching *3 TRK MIN SEC ?? ?? ??
[5] Gop Mode *10 Gop Mode switching TRK MIN SEC OL OL OL
[1] T.Close & AGC Applicable servomechanism TRK MIN SEC ?tr ?min ?sec
[6] T.Close Applicable servomechanism TRK MIN SEC ?tr ?min ?sec
[3] RF AGC / RF AGC coefficient display TRK MIN SEC ?? ?? ??
8X 8X 8X or 9X 9X 9X
[2] T.Balance adjustment / T.BAL coefficient display TRK MIN SEC ?? ?? ??
[1] F,T,RF AGC *7 F.Bias display switching TRK MIN SEC ?? ?? ??
[3] F,T AGC / F.Bias RF AGC TRK MIN SEC ?tr ?min ?sec
[6] CRG/TR jump value switching *5 TRK MIN SEC ?tr ?min ?sec
[>] CRG/TR Jump + *4 TRK MIN SEC ?tr ?min ?sec
[<] CRG/TR Jump - *4 TRK MIN SEC ?tr ?min ?sec
[2] Tracking Open 8X 8X 8X or 9X 9X 9X
*6

*1) TYP (TRK MIN SEC) -> + 6 dB ($^{TRK}06^{MIN}06^{SEC}06$) -> + 12 dB ($^{TRK}12^{MIN}12^{SEC}12$)

*2) Focus Close ($^{TRK}00^{MIN}00^{SEC}00$ / $^{TRK}99^{MIN}99^{SEC}99$) -> S.Curve ($^{TRK}01^{MIN}01^{SEC}01$) -> F EQ measurement setting ($^{TRK}02^{MIN}02^{SEC}02$)

*3) F.Offset Display -> RF.Offset -> T.Offset Display -> Switch to the order of the original display

*4) 1TR/4TR/10TR/32TR/100TR

*5) Single -> 4TR -> 10TR -> 32TR -> 100TR -> CRG Move
9x(8x):91(81) 92(82) 93(83) 94(84) 95(85) 96(86)

*6) Only at the time of CRG move, 100TR jump

*7) TRK/MIN/SEC -> F.AGC -> T.AGC Gain -> F Bias -> RF AGC

*8) CRG motor voltage = 2 [V]

*9) TYP (1X) (TRK MIN SEC) -> 2X ($^{TRK}22^{MIN}22^{SEC}22$) -> 1X ($^{TRK}11^{MIN}11^{SEC}11$)

*10) OFF(TYP) (TRK MIN SEC) -> FORCUS ($^{TRK}70^{MIN}70^{SEC}70$) -> TRACKING ($^{TRK}71^{MIN}71^{SEC}71$)

[Key]	Operation Test Mode
[BAND]	Power On/Off
[>]	CRG + / TR Jump + (Direction of the external surface)
[<]	CRG - / TR Jump - (Direction of the internal surface)
[1]	T. CLS & AGC & Applicable servomechanism / AGC,AGC display setting
[2]	RF Gain switching / Offset adjustment display / T.Balance adjustment / T. Open
[3]	F. Close,S Curve / Rough Servo and RF AGC / F,T,RF AGC
[4]	SPDL 1X/2X switching As for the double speed(2x), audio output cannot be supported.
[5]	Error Rate measurement ON : ERR 30 Counts Start BER display data[%]
[6]	F. Mode switching / Tracking Close / CRG•TR Jump Switching

- As for the double speed (2x), audio output cannot be supported
- After the [Eject] key is pressed keys other than the [Eject] key should not be pressed, until disc ejection is complete.
- When the key [2] or [3] is pressed during the Focus Search, the power supply should be immediately turned off (otherwise the lens sticks to Wall, causing the actuator to be damaged).
- In the case of TR jump other than to 100TR, the function shall continue to be processed even if the TR jump key is released. As for the CRG Move and 100TR Jump, the mechanism shall be set to the Tracking Close mode when the key is released.
- When the power is turned on/off the jump mode is reset to the Single TR (91) while the gain of the RFAMP is reset to 0 dB. At the same time all the self-adjusting values shall return to the default setting.

7. DISASSEMBLY

●Removing the Case (not shown)

1. Remove the Case.

●Removing the CD Mechanism Module (Fig.1)

1 Release the three latches and then remove the Panel Assy.

2 Remove the four screws.

Disconnect the connector and then remove the CD Mechanism Module.

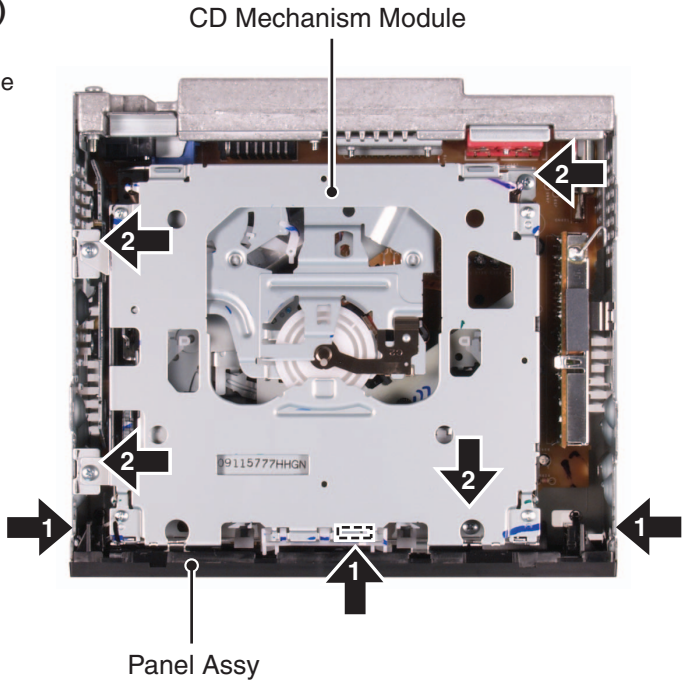


Fig.1

●Removing the Tuner Amp Unit (Fig.2)

1 Remove the three screws.

2 Remove the screw.

3 Straighten the tabs at four locations indicated and then remove the Tuner Amp Unit.

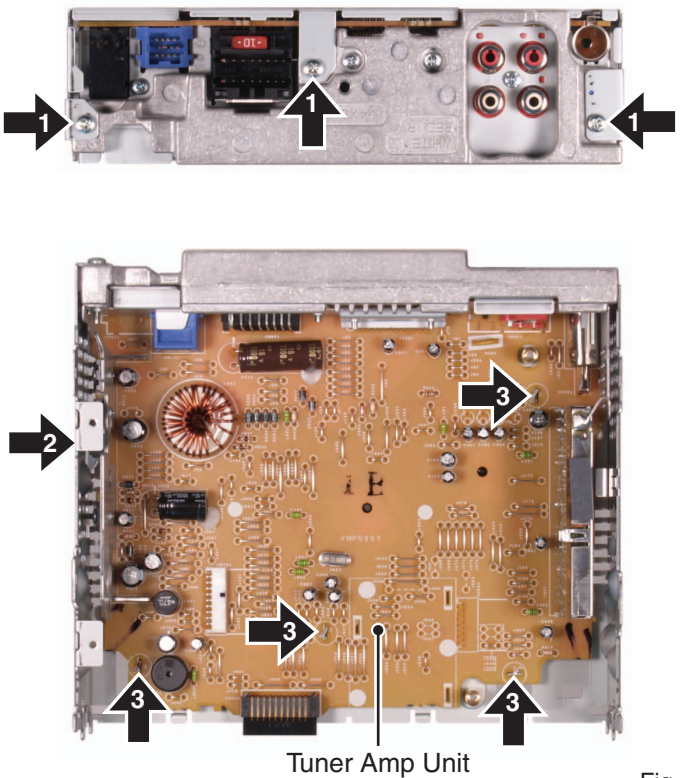
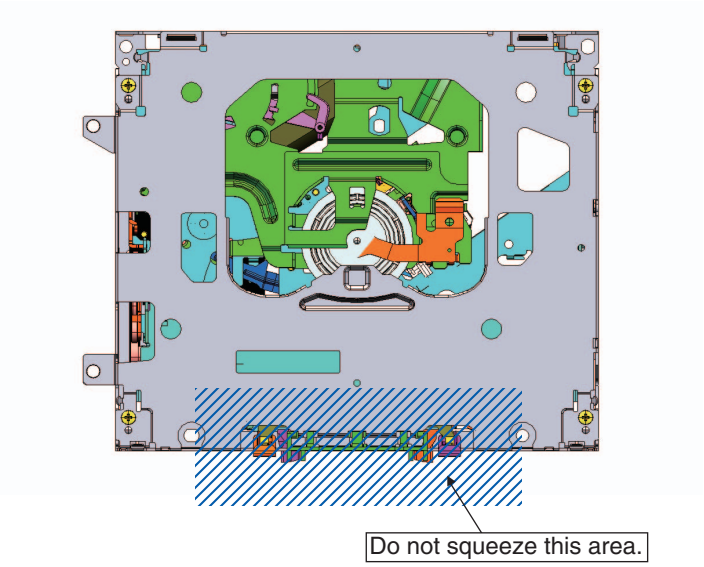


Fig.2

● How to hold the Mechanism Unit

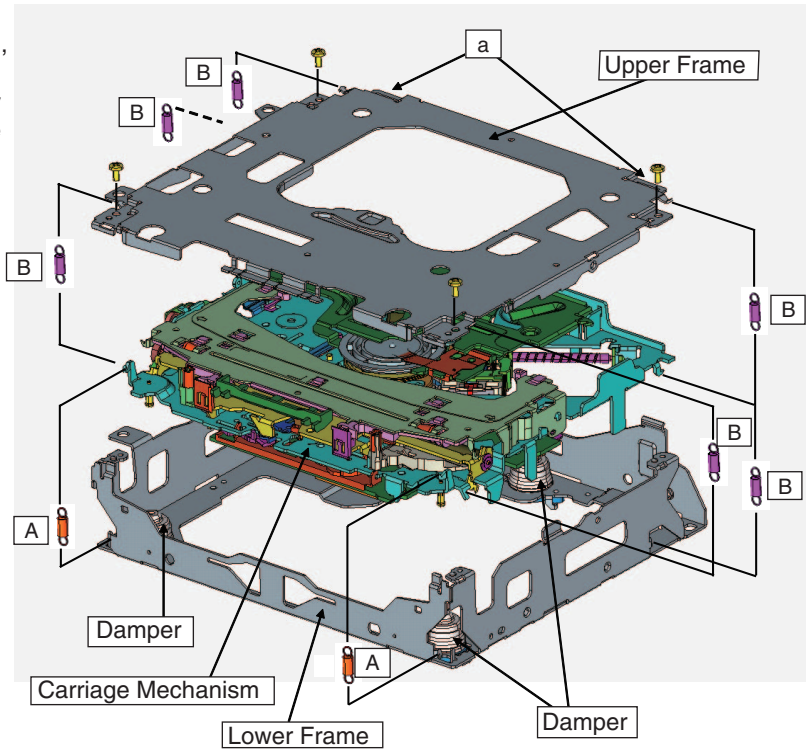
1. Hold the Upper and Lower Frames.
2. Do not hold the front portion of the Upper Frame, because it is not very solid.



● Removing the Upper and Lower Frames

1. With a disc inserted and clamped in the mechanism, remove the two Springs (A), the six Springs (B), and the four Screws.
2. Turn the Upper Frame using the part "a" as a pivot, and remove the Upper Frame.
3. While lifting the Carriage Mechanism, remove it from the three Dampers.

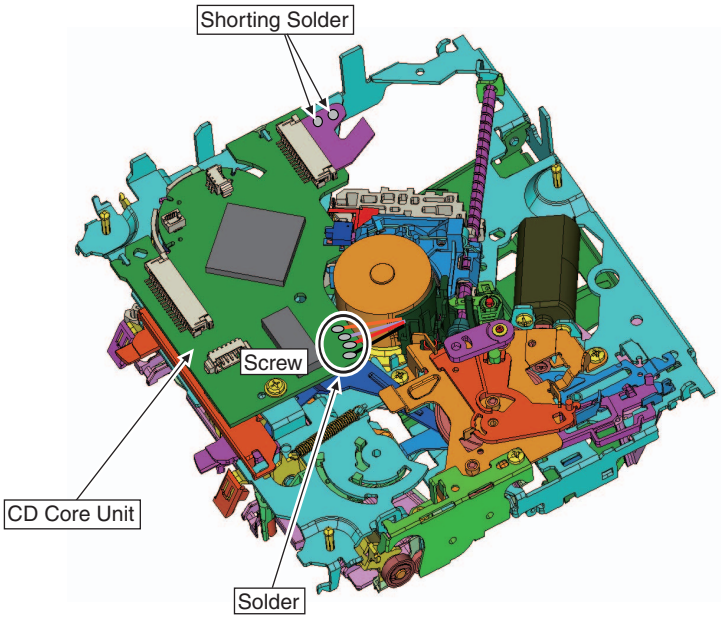
Caution: When assembling, be sure to apply some alcohol to the Dampers and assemble the mechanism in a clamped state.



● How to remove the CD Core Unit

1. Apply Shorting Solder to the flexible cable of the Pickup, and disconnect it from the connector.
2. Unsolder the four leads, and loosen the Screw.
3. Remove the CD Core Unit.

Caution: When assembling the CD Core Unit, assemble it with the SW in a clamped state so as not to damage it.

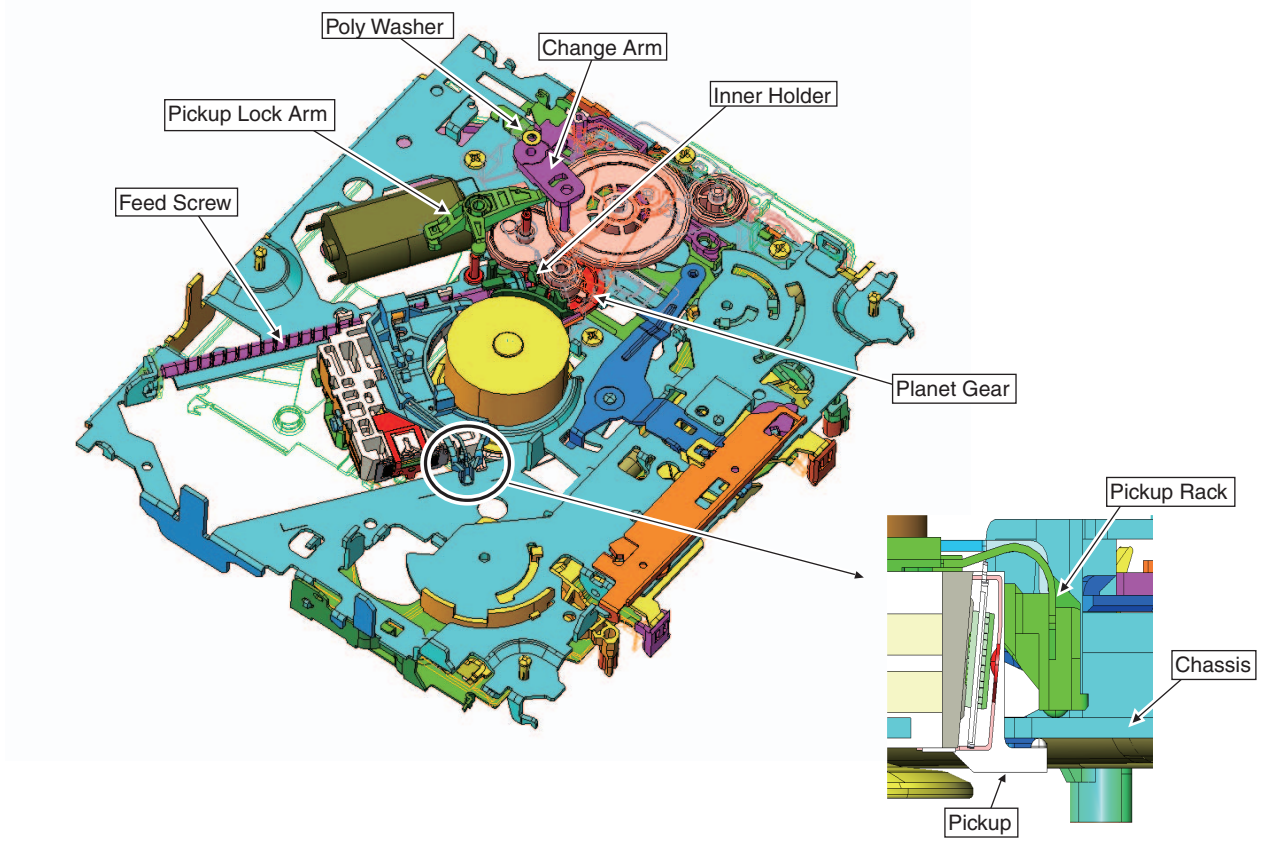


● How to remove the Pickup Unit

1. Make the system in the carriage mechanism mode, and have it clamped.
2. Remove the CD Core Unit and remove the leads from the Inner Holder.
3. Remove the Poly Washer, Change Arm, and Pickup Lock Arm.
4. While releasing from the hook of the Inner Holder, lift the end of the Feed Screw.

Caution: When assembling, move the Planet Gear to the load/eject position before setting the Feed Screw in the Inner Holder.

Assemble the sub unit side of the Pickup, taking the plate (Chassis) in-between. When treating the leads of the Load Carriage Motor Assy, do not make them loose over the Feed Screw.



8. EACH SETTING AND ADJUSTMENT
8.1 CD ADJUSTMENT

1) Cautions on adjustments
• In this product the single voltage (3.3 V) is used for the regulator. The reference voltage is the REFO1 (1.65 V) instead of the GND.
If you should mistakenly short the REFO1 with the GND during adjustment, accurate voltage will not be obtained, and the servo's misoperation will apply excessive shock to the pickup. To avoid such problems:
a. Do not mix up the REFO1 with the GND when connecting the (-) probe of measuring instruments. Especially on an oscilloscope, avoid connecting the (-) probe for CH1 to the GND.
b. In many cases, measuring instruments have the same potential as that for the (-) probe. Be sure to set the measuring instruments to the floating state.
c. If you have mistakenly connected the REFO1 to the GND, turn off the regulator or the power immediately.

• Before mounting and removing filters or leads for adjustment, be sure to turn off the regulator.

• For stable circuit operation, keep the mechanism operating for about one minute or more after the regulator is turned on.

• In the test mode, any software protections will not work. Avoid applying any mechanical or electrical shock to the mechanism during adjustment.

• The RFI and RFO signals with a wide frequency range are easy to oscillate. When observing the signals, insert a resistor of 1k ohms in series.

• The load and eject operation is not guarantied with the mechanism upside down. If the mechanism is blocked due to mistaken eject operation, reset the product or turn off and on the ACC to restore it.

2) Test mode
This mode is used to adjust the CD mechanism module.
• To enter the test mode.
While pressing the 4 and 6 keys at the same time, reset.
• To exit from the test mode.
Turn off the ACC and back up.

Notes:
a. During ejection, do not press any other keys than the EJECT key until the loaded disc is ejected.
b. If you have pressed the (->) key or (<-) key during focus search, turn off the power immediately to protect the actuator from damage caused by the lens stuck.
c. For the TR jump modes except 100TR, the track jump operation will continue even if the key is released.
d. For the CRG move and 100TR jump modes, the tracking loop will be closed at the same time when the key is released.
e. When the power is turned off and on, the jump mode is reset to the single TR (91), the RF amp gain is set to 0 dB, and the auto-adjustment values are reset to the default settings.

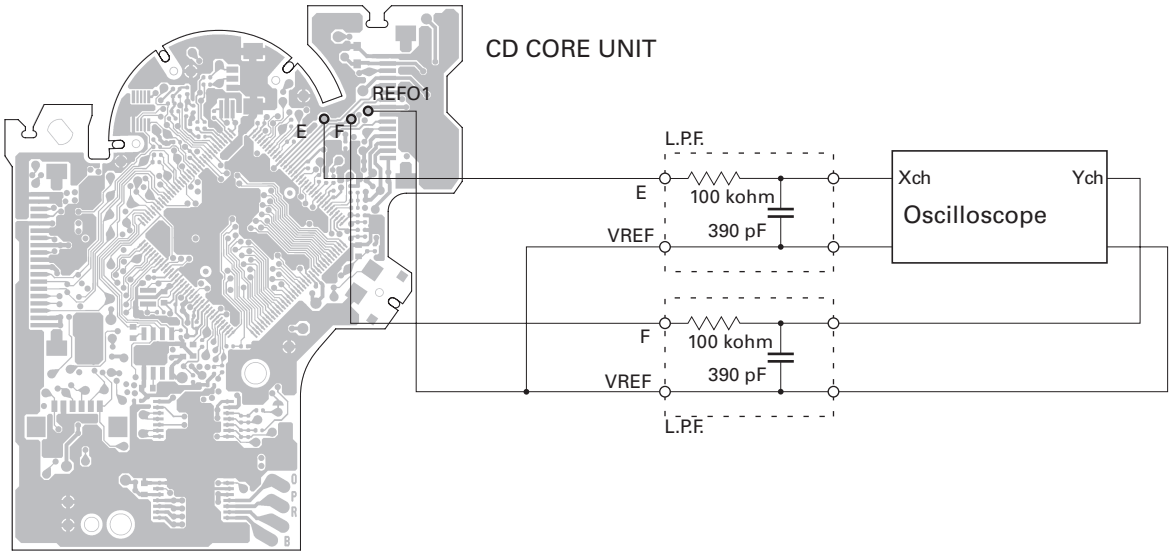
8.2 CHECKING THE GRATING AFTER CHANGING THE PICKUP UNIT

- **Note :**
  The grating angle of the PU unit cannot be adjusted after the PU unit is changed. The PU unit in the CD mechanism module is adjusted on the production line to match the CD mechanism module and is thus the best adjusted PU unit for the CD mechanism module. Changing the PU unit is thus best considered as a last resort. However, if the PU unit must be changed, the grating should be checked using the procedure below.

- **Purpose :**
  To check that the grating is within an acceptable range when the PU unit is changed.

- **Symptoms of Mal-adjustment :**
  If the grating is off by a large amount symptoms such as being unable to close tracking, being unable to perform track search operations, or taking a long time for track searching.

- **Method :**
- Measuring Equipment • Oscilloscope, Two L.P.F.
- Measuring Points • E, F, REFO1
- Disc • TCD-782
- Mode • TEST MODE



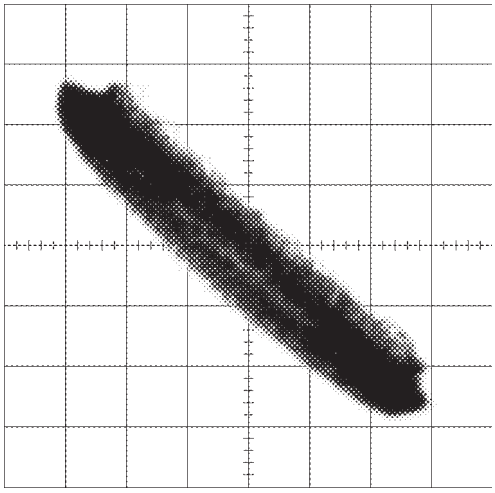
- **Checking Procedure**
1. In test mode, load the disc and switch the 3 V regulator on.
2. Using the -> and <- buttons, move the PU unit to the innermost track.
3. Press key 3 to close focus, the display should read "91". Press key 2 to implement the tracking balance adjustment the display should now read "81". Press key 3. The display will change, returning to "81" on the fourth press.
4. As shown in the diagram above, monitor the LPF outputs using the oscilloscope and check that the phase difference is within 75 degrees. Refer to the photographs supplied to determine the phase angle.
5. If the phase difference is determined to be greater than 75 degrees try changing the PU unit to see if there is any improvement. If, after trying this a number of times, the grating angle does not become less than 75 degrees then the mechanism should be judged to be at fault.

- **Note**
  Because of eccentricity in the disc and a slight misalignment of the clamping center the grating waveform may be seen to "wobble" (the phase difference changes as the disc rotates). The angle specified above indicates the average angle.
- **Hint**
  Reloading the disc changes the clamp position and may decrease the "wobble".

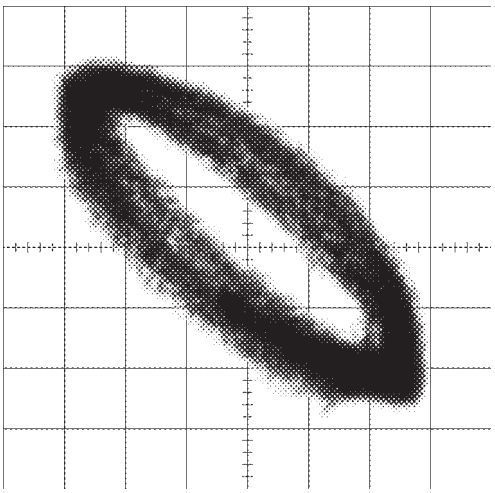
Grating waveform

Ech -> Xch 20 mV/div, AC
Fch -> Ych 20 mV/div, AC

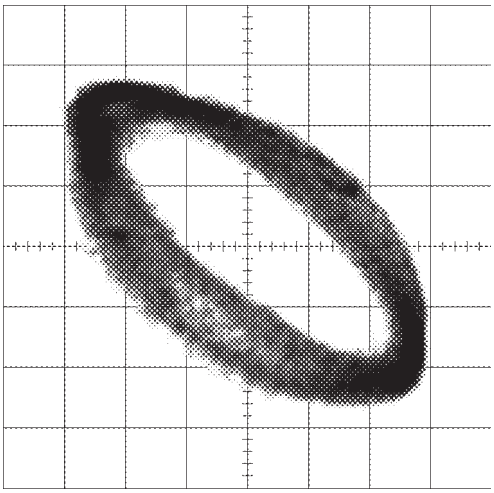
0 degrees



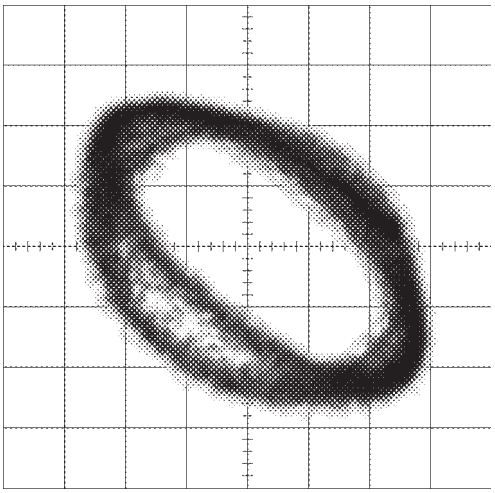
30 degrees



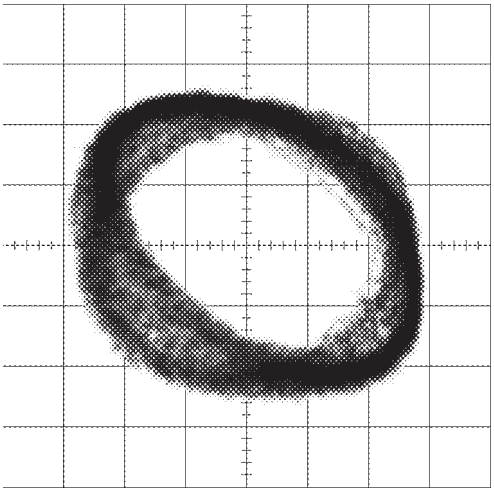
45 degrees



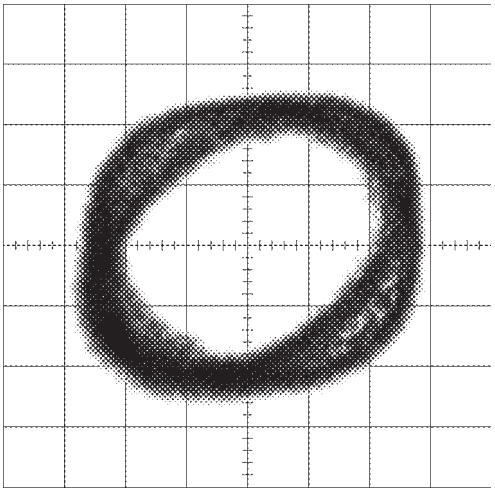
60 degrees



75 degrees



90 degrees



8.3 PCL OUTPUT CONFIRMATION

● PCL output

In the normal operation mode (with the detachable panel installed, the ACC switched ON, the standby mode cancelled), shift the STEST IC601(Pin 63) terminal to H.
The clock signal is output from the PCL1 terminal IC601(Pin 39).
The frequency of the clock signal is 468.750 Hz that is one 32th of the fundamental frequency.

A

B

C

D

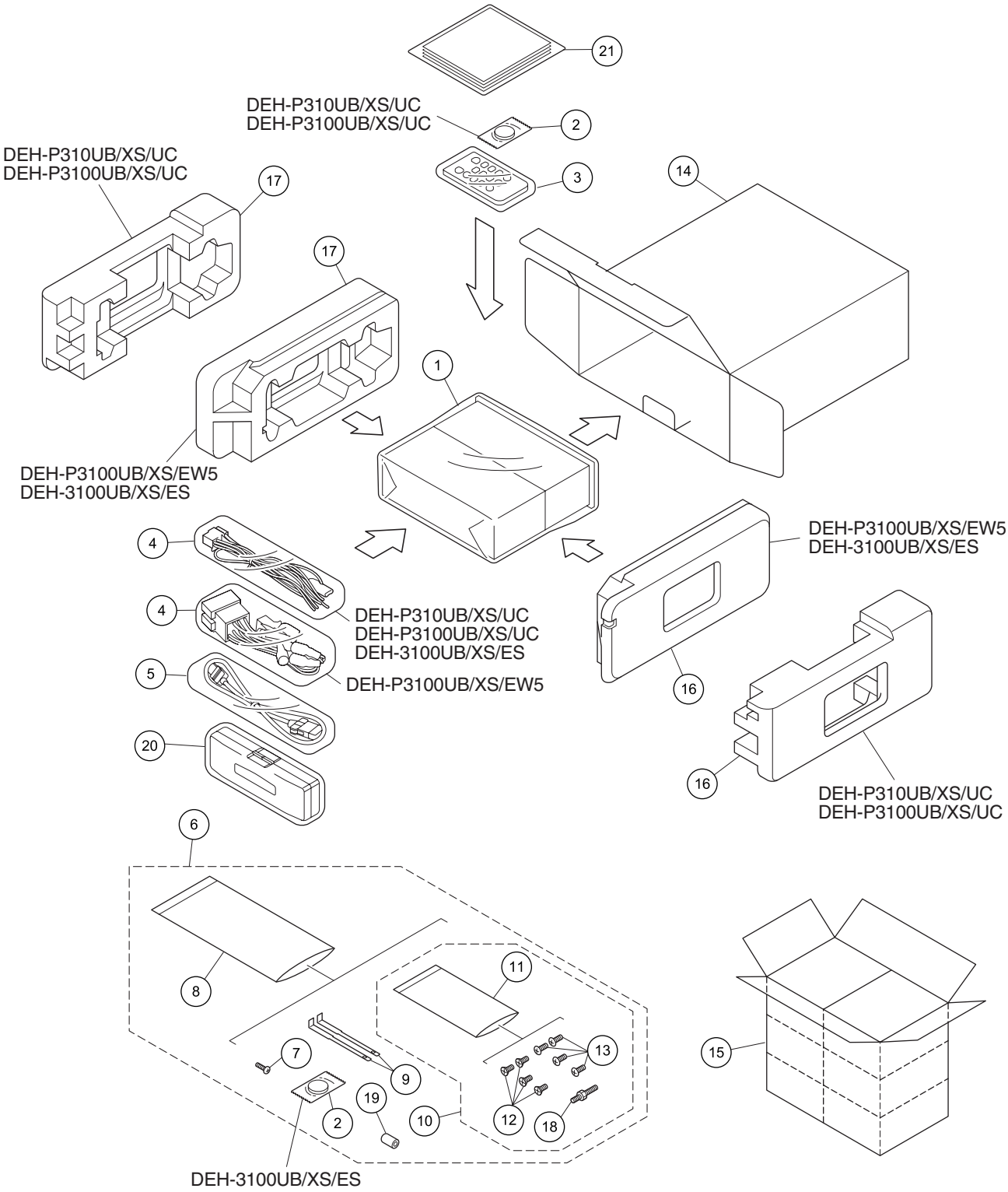
E

F

9. EXPLODED VIEWS AND PARTS LIST

NOTES : • *Parts marked by " * " are generally unavailable because they are not in our Master Spare Parts List.*
• *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
• *Screw adjacent to▽ mark on the product are used for disassembly.*
• *For the applying amount of lubricants or glue, follow the instructions in this manual. (In the case of no amount instructions,apply as you think it appropriate.)*

9.1 PACKING



(1) PACKING SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Polyethylene Bag	See Contrast table (2)
*	2	Battery	See Contrast table (2)
	3	Remote Control Assy	See Contrast table (2)
	4	Cord Assy	See Contrast table (2)
	5	Cord Assy	See Contrast table (2)
	6	Accessory Assy	See Contrast table (2)
	7	Screw	See Contrast table (2)
	8	Polyethylene Bag	CEG1160
	9	Handle	CND3707
	10	Screw Assy	See Contrast table (2)
*	11	Polyethylene Bag	CEG-127
	12	Screw	CRZ50P090FTC
	13	Screw	TRZ50P080FTC
	14	Unit Box	See Contrast table (2)
	15	Contain Box	See Contrast table (2)
	16	Protector	See Contrast table (2)
	17	Protector	See Contrast table (2)
	18	Screw	See Contrast table (2)
	19	Bush	See Contrast table (2)
	20	Case Assy	See Contrast table (2)
	21-1	Caution Card	See Contrast table (2)
	21-2	Caution Card	See Contrast table (2)
*	21-3	Warranty Card	See Contrast table (2)
	21-4	Installation Manual	See Contrast table (2)
	21-5	Owner's Manual	See Contrast table (2)
	21-6	Owner's Manual	See Contrast table (2)

(2) CONTRAST TABLE

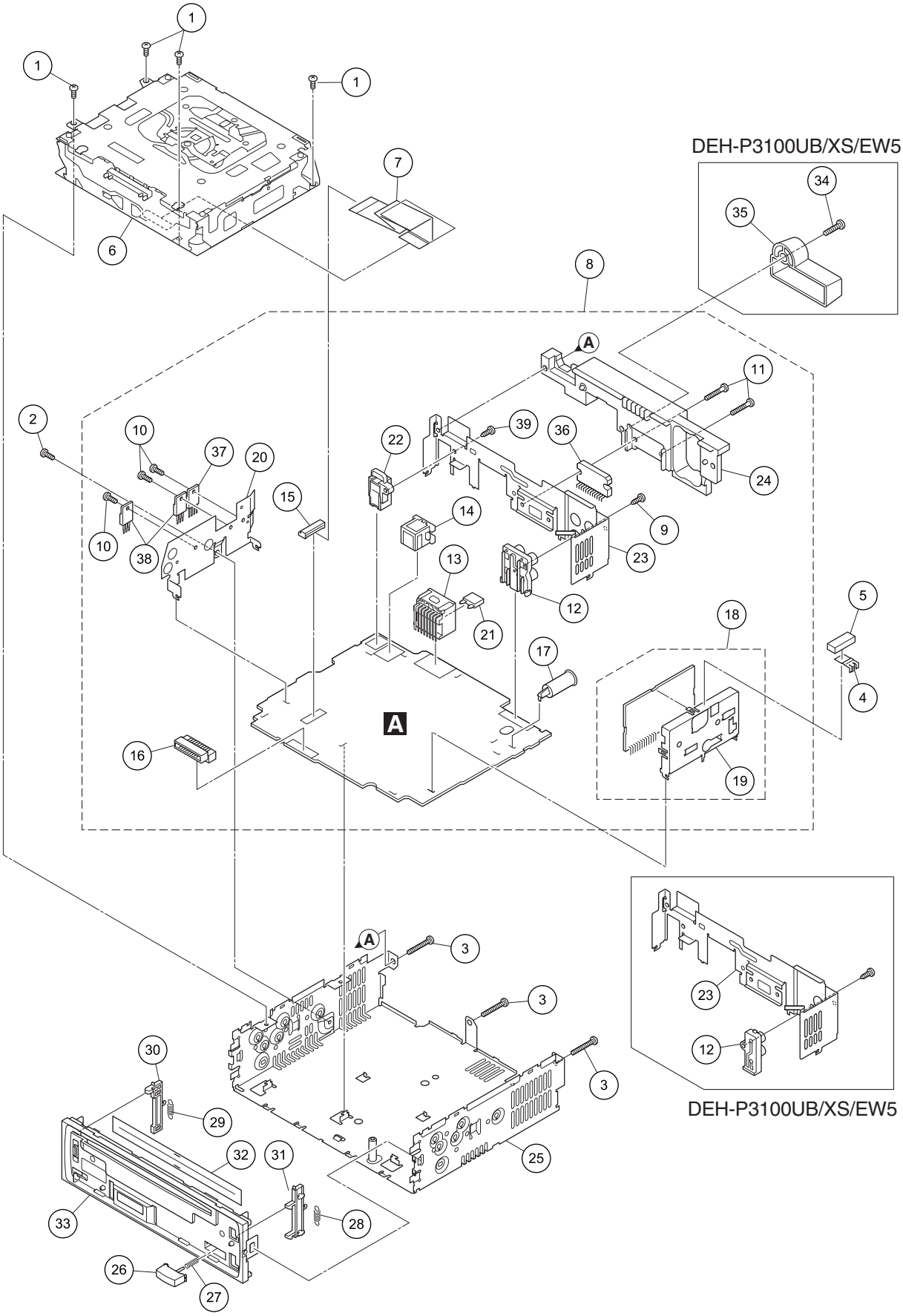
DEH-P310UB/XS/UC, DEH-P3100UB/XS/UC, DEH-P3100UB/XS/EW5 and DEH-3100UB/XS/ES are constructed the same except for the following:

Mark	No.	Description	DEH-P310UB/XS/UC	DEH-P3100UB/XS/UC	DEH-P3100UB/XS/EW5	DEH-3100UB/XS/ES
	1	Polyethylene Bag	CEG1173	CEG1173	CEG-162	CEG-162
*	2	Battery	CEX1065	CEX1065	Not used	CEX1065
	3	Remote Control Assy	CXC8885	CXC8885	Not used	CXC8885
	4	Cord Assy	YDP5022	YDP5022	CDP1015	CDP1017
	5	Cord Assy	YDP5026	Not used	Not used	Not used
	6	Accessory Assy	*YEA5071	*YEA5071	*CEA6707	CEA9954
	7	Screw	BPZ20P060FTC	BPZ20P060FTC	BPZ20P080FTC	Not used
	10	Screw Assy	YEA5072	YEA5072	CEA3849	CEA3849
	14	Unit Box	YHG5486	YHG5478	YHG5475	YHG5477
	15	Contain Box	YHL5486	YHL5478	YHL5475	YHL5477
	16	Protector	YHP5052	YHP5052	YHP5050	YHP5050
	17	Protector	YHP5053	YHP5053	YHP5051	YHP5051
	18	Screw	Not used	Not used	CBA1650	CBA1650
	19	Bush	Not used	Not used	CNV3930	CNV3930
	20	Case Assy	Not used	Not used	YXB5009	YXB5009
	21-1	Caution Card	CRP1387	CRP1387	Not used	CRP1387
	21-2	Caution Card	Not used	CRP1386	Not used	Not used
*	21-3	Warranty Card	CRY1280	CRY1276	CRY1279	Not used
	21-4	Installation Manual	YRD5273	YRD5275	YRD5276	YRD5271
	21-5	Owner's Manual	YRD5272	YRD5274	YRD5277	YRD5269
	21-6	Owner's Manual	Not used	Not used	YRD5278	YRD5270

Owner's Manual,Installation Manual

Part No.	Language
YRD5273	English, French,Spanish(Espanol)
YRD5275	English, French,Spanish(Espanol)
YRD5276	English, Spanish(Espanol), German, French, Italian, Dutch, Russian
YRD5271	English, Spanish(Espanol), Portuguese(B), Traditional Chinese, Arabic
YRD5272	English, French, Spanish(Espanol)
YRD5274	English, French, Spanish(Espanol)
YRD5277	English, Spanish(Espanol)
YRD5278	German, French, Italian, Dutch. Russian
YRD5269	English, Spanish(Espanol), Arabic
YRD5270	Portuguese(B), Traditional Chinese

9.2 EXTERIOR (1)



(1) EXTERIOR (1) SECTION PARTS LIST

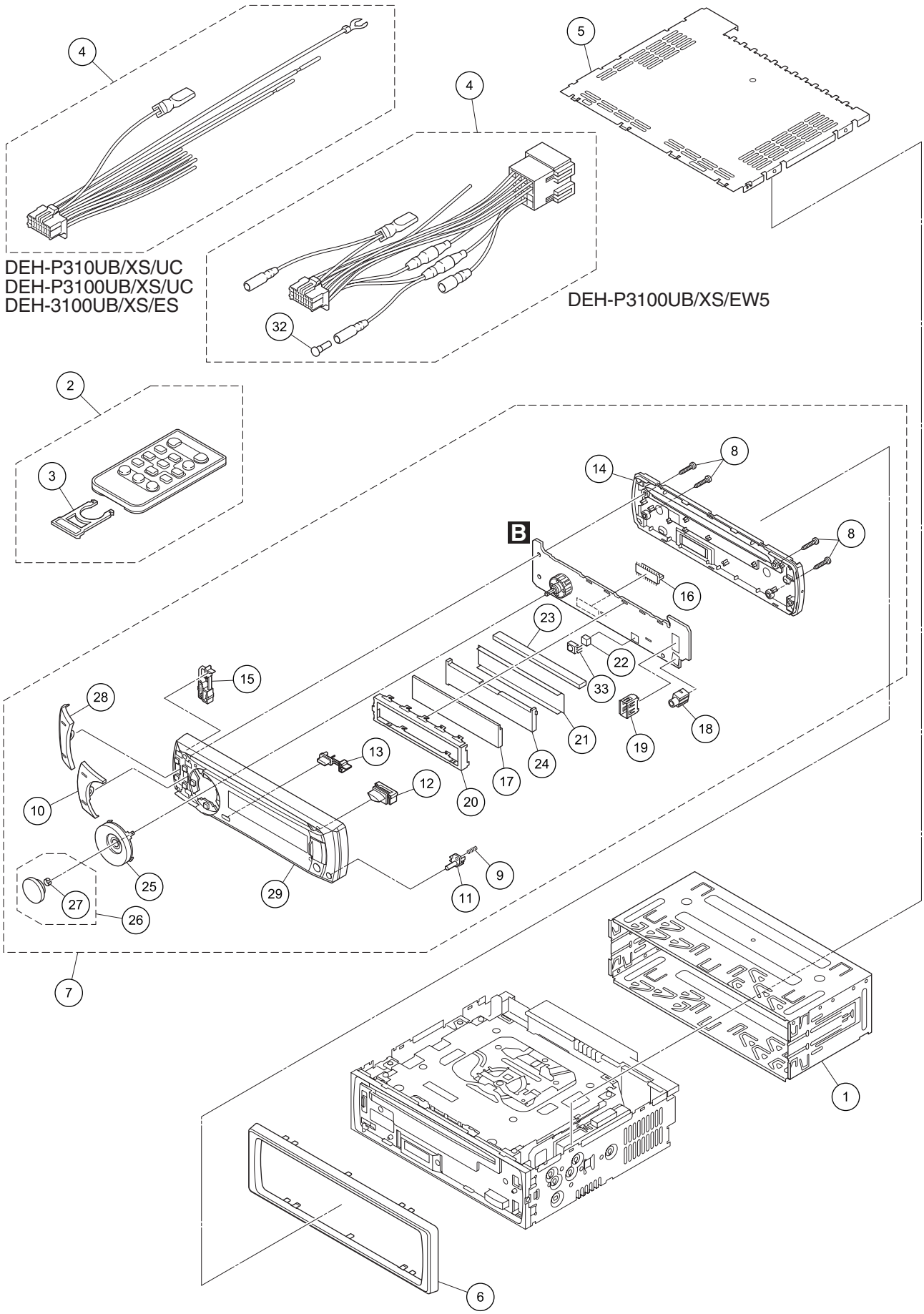
Mark	No.	Description	Part No.
	1	Screw	BSZ26P060FTC
	2	Screw	BSZ30P060FTC
	3	Screw	BSZ30P200FTC
	4	Earth Plate	CNC8915
	5	Cushion	CNM8890
	6	CD Mechanism Module(S10.5)	CXK5777
	7	Cable	YDE5030
	8	Tuner Amp Assy	See Contrast table (2)
	9	Screw	BPZ26P080FTC
	10	Screw	BSZ26P060FTC
	11	Screw	BSZ26P200FTC
	12	Pin Jack(CN351)	See Contrast table (2)
	13	Plug(CN901)	CKM1376
	14	Connector(CN101)	See Contrast table (2)
	15	Connector(CN701)	CKS3833
	16	Connector(CN803)	CKS6050
	17	Antenna Jack(CN401)	CKX1070
	18	FM/AM Tuner Unit	See Contrast table (2)
	19	Holder	CND4324
	20	Holder	XNC7030
⚠	21	Fuse(10 A)	YEK5001
	22	Jack(CN621)	See Contrast table (2)
	23	Holder	See Contrast table (2)
	24	Heat Sink	YNR5128
	25	Chassis Unit	See Contrast table (2)
	26	Button	CAC4836
	27	Spring	CBH2367
	28	Spring(Silver)	CBH2961
	29	Spring(Black)	CBH2962
	30	Arm	CNV9312
	31	Arm	CNW1439
	32	Cover	YNN5016
	33	Panel	YNS5468
	34	Screw	See Contrast table (2)
	35	Holder	See Contrast table (2)
	36	IC(IC301)	PAL007C
	37	IC(IC921)	NJM2388F84
	38	Transistor(Q702, Q911)	2SD2396
	39	Screw	See Contrast table (2)

(2) CONTRAST TABLE

DEH-P310UB/XS/UC, DEH-P3100UB/XS/UC, DEH-P3100UB/XS/EW5 and DEH-3100UB/XS/ES are constructed the same except for the following:

Mark	No.	Description	DEH-P310UB/XS/UC	DEH-P3100UB/XS/UC	DEH-P3100UB/XS/EW5	DEH-3100UB/XS/ES
	8	Tuner Amp Assy	YWM5360	YWM5361	YWM5359	YWM5362
	12	Pin Jack(CN351)	CKB1054	CKB1054	CKB1056	CKB1054
	14	Connector(CN101)	CKS3408	CKS3408	CKS3408	Not used
	18	FM/AM Tuner Unit	CWE2098	CWE2098	CWE2097	CWE2098
	22	Jack(CN621)	YKS5002	Not used	YKS5002	YKS5002
	23	Holder	YNC5041	YNC5079	YNC5042	YNC5055
	25	Chassis Unit	YXA5524	YXA5524	YXA5573	YXA5524
	34	Screw	Not used	BMZ40P140FTC	Not used	Not used
	35	Holder	Not used	CNV7619	Not used	Not used
	39	Screw	BPZ26P080FTC	Not used	BPZ26P080FTC	BPZ26P080FTC

9.3 EXTERIOR (2)



(1) EXTERIOR (2) SECTION PARTS LIST

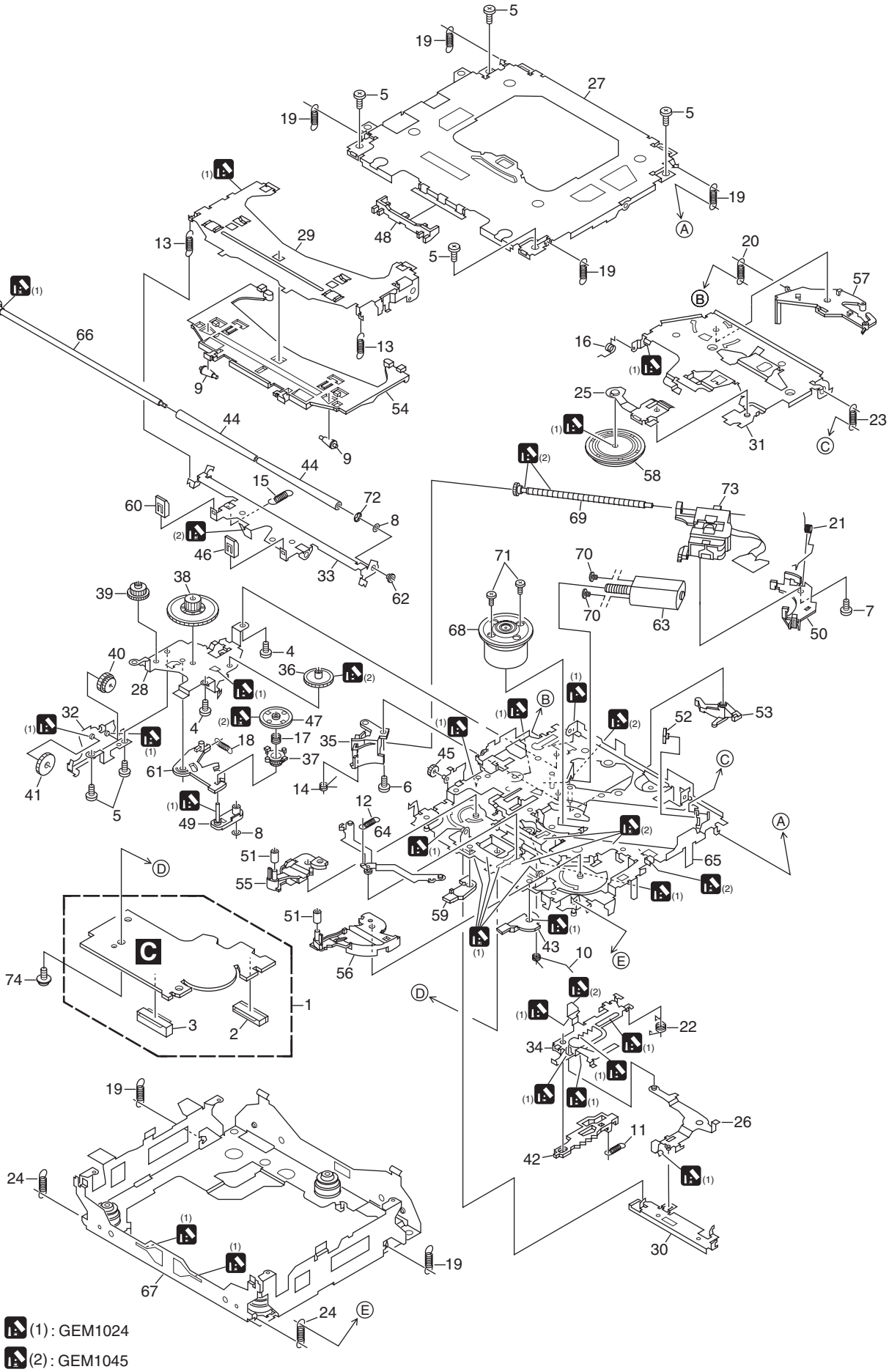
Mark	No.	Description	Part No.
	1	Holder	CND3598
	2	Remote Control Assy	See Contrast table (2)
	3	Cover	See Contrast table (2)
	4	Cord Assy	See Contrast table (2)
	5	Case	YNB5014
	6	Panel	YNS5517
	7	Detachable Assy	See Contrast table (2)
	8	Screw	BPZ20P100FTB
	9	Spring	CBH2210
	10	Button(LIST, DISP)	YAC5360
	11	Button(DETACH)	YAC5366
	12	Button(EJECT)	YAC5367
	13	Button(UC:CLOCK, EW5/ES:TA)	YAC5368
	14	Cover	YNS5429
	15	Holder	YNV5180
	16	Connector(CN4)	CKS6049
	17	LCD(LCD1)	YAW5101
	18	Jack(CN3)	YKN5006
	19	Connector(CN2)	YKS5032
	20	Holder	YNC5062
	21	Sheet	YNM5143
	22	Cushion	YNM5148
	23	Connector	YNV5140
	24	Lighting Conductor	YNV5173
	25	Button Unit	See Contrast table (2)
	26	Knob Unit	See Contrast table (2)
	27	Spring	YBL5013
	28	Button Unit(SRC, BAND)	YXA5567
	29	Grille Unit	See Contrast table (2)
	30	.....	
	31	.....	
	32	Terminal Cover	See Contrast table (2)
	33	Remote IC(IC2)	GP1UXC14RK

(2) CONTRAST TABLE

DEH-P310UB/XS/UC, DEH-P3100UB/XS/UC, DEH-P3100UB/XS/EW5 and DEH-3100UB/XS/ES are constructed the same except for the following:

Mark	No.	Description	DEH-P310UB/XS/UC	DEH-P3100UB/XS/UC	DEH-P3100UB/XS/EW5	DEH-3100UB/XS/ES
	2	Remote Control Assy	CXC8885	CXC8885	Not used	CXC8885
	3	Cover	CNS7068	CNS7068	Not used	CNS7068
	4	Cord Assy	YDP5022	YDP5022	CDP1015	CDP1017
	7	Detachable Assy	YXA5534	YXA5528	YXA5533	YXA5536
	25	Button Unit	YXA5521 (S.Rtrv, SW, iPod, LOC)	YXA5521 (S.Rtrv, SW, iPod, LOC)	YXA5587 (S.Rtrv, MUTE, iPod, LOC)	YXA5570 (S.Rtrv, SW, iPod, LOC)
	26	Knob Unit	YXA5522	YXA5523	YXA5522	YXA5522
	29	Grille Unit	YXA5592	YXA5591	YXA5593	YXA5594
	32	Terminal Cover	Not used	Not used	CKX-003	Not used

9.4 CD MECHANISM MODULE



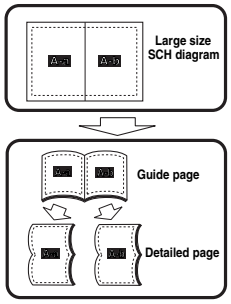
CD MECHANISM MODULE SECTION PARTS LIST

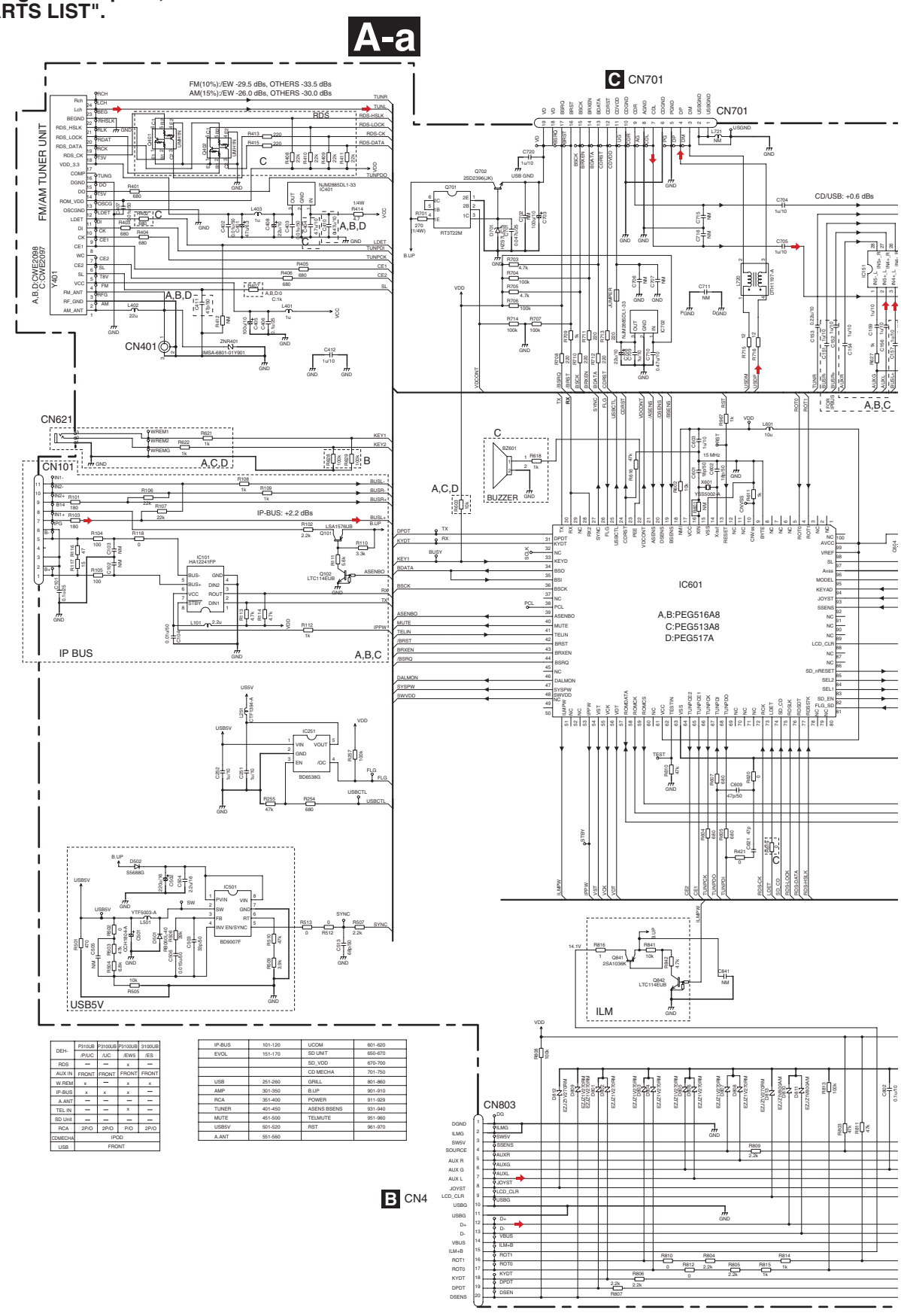
Mark	No.	Description	Part No.
	1	CD Core Unit(S10.5iPod-C3-CLASS1)	CWX3727
	2	Connector(CN101)	CKS4808
	3	Connector(CN701)	CKS5854
	4	Screw	BMZ20P025FTC
	5	Screw	BSZ20P040FTC
	6	Screw(M2 x 3)	CBA1511
	7	Screw(M2 x 4)	CBA1835
	8	Washer	CBF1038
	9	Roller	CNV9499
	10	Spring	CBH2609
	11	Spring	CBH2612
	12	Spring	CBH2614
	13	Spring	CBH2616
	14	Spring	CBH2617
	15	Spring	CBH2620
	16	Spring	CBH2855
	17	Spring	CBH2937
	18	Spring	CBH2735
	19	Spring	CBH2854
	20	Spring	CBH2642
	21	Spring	CBH2856
	22	Spring	CBH2857
	23	Spring	CBH2860
	24	Spring	CBH2861
	25	Spring	CBL1686
	26	Arm	CND1909
	27	Frame	CND2582
	28	Bracket	CND2583
	29	Arm	CND3831
	30	Lever	CND2585
	31	Arm	CND2586
	32	Bracket	CND2587
	33	Arm	CND2588
	34	Lever	CND2589
	35	Holder	CNV9522
	36	Gear	CNV7207
	37	Gear	CNV9513
	38	Gear	CNV7209
	39	Gear	CNV9514
	40	Gear	CNV9515
	41	Gear	CNV9516
	42	Rack	CNV9517
	43	Arm	CNV7216
	44	Roller	CNV8189
	45	Gear	CNV9518
	46	Guide	CNV9519
	47	Gear	CNV7595
	48	Guide	CNV9520
	49	Arm	CNV7805
	50	Rack	CNV8342
	51	Roller	CNV8343
	52	Holder	CNV8344
	53	Arm	CNV8345
	54	Guide	CNV9498
	55	Arm	CNV8348
	56	Arm	CNV8349
	57	Arm	CNV8350
	58	Clamper	CNV8365
	59	Arm	CNV8386
	60	Guide	CNV8396
	61	Arm	CNV9521
	62	Collar	CNV8447
	63	Motor Unit(M2)	CXC4026
	64	Arm Unit	CXC4027
	65	Chassis Unit	CXC4028
	66	Gear Unit	CXC4029
	67	Frame Unit	CXC4031
	68	Motor Unit(M1)	CXC7134
	69	Screw Unit	CXC6359
	70	Screw	JFZ20P025FTC
	71	Screw	JGZ17P022FTC
	72	Washer	YE20FTC
	73	Pickup Unit(P10.5)(Service)	CXX1942
	74	Screw	IMS26P030FTC

10. SCHEMATIC DIAGRAM

10.1 TUNER AMP ASSY(GUIDE PAGE)

Note: When ordering service parts, be sure to refer to " EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".





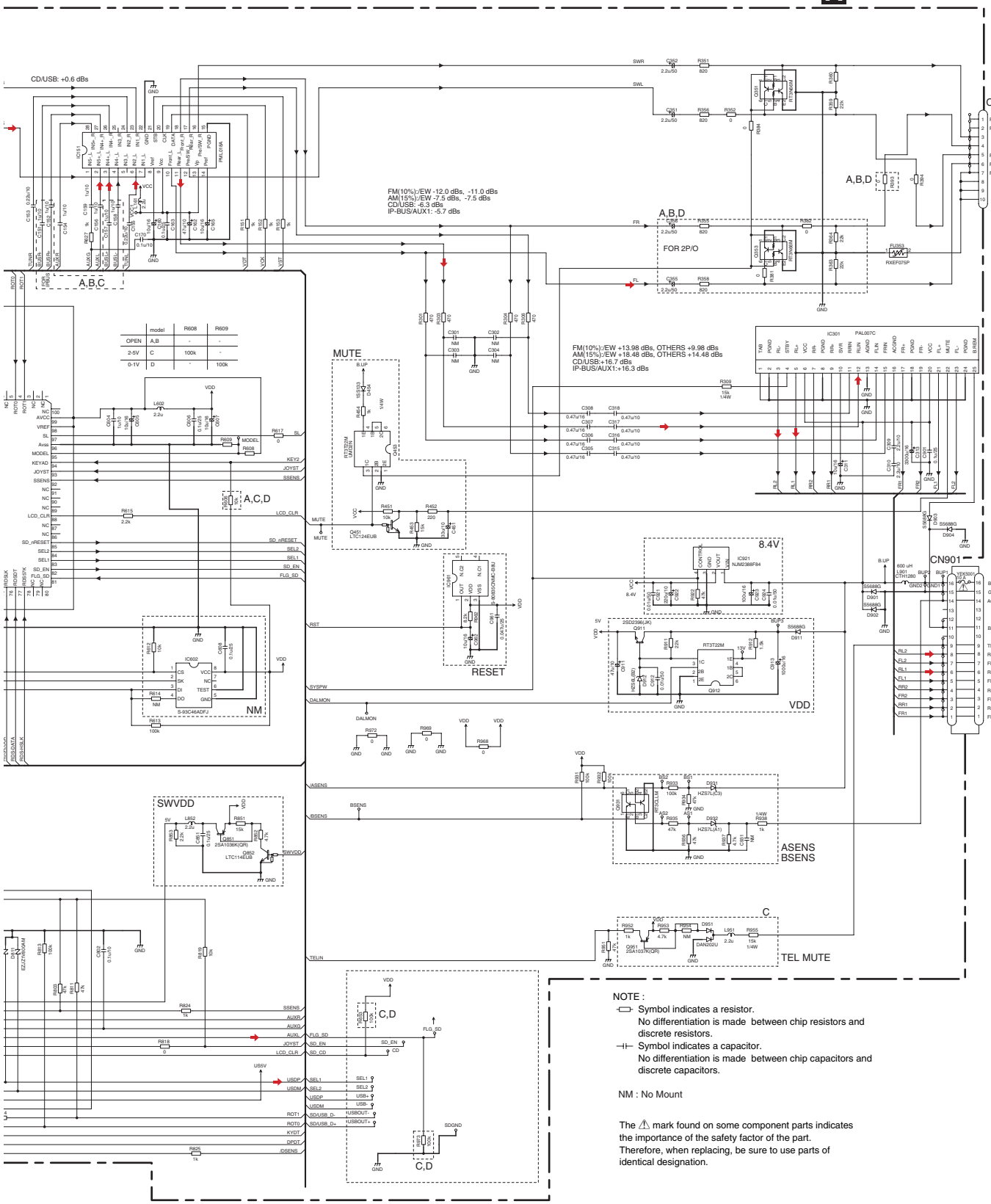
DEH-	P310UB /P/UC	P310UB /UC	P310UB /EW5	3100UB /ES
RDS	—	—	x	—
AUX IN	FRONT	FRONT	FRONT	FRONT
W.REM	x	—	x	x
IP-BUS	x	x	x	—
A.ANT	—	—	—	—
TEL IN	—	—	x	—
SD Unit	—	—	—	—
RCA	2P/O	2P/O	P/O	2P/O
CDMECHA	IPOD			
USB	FRONT			

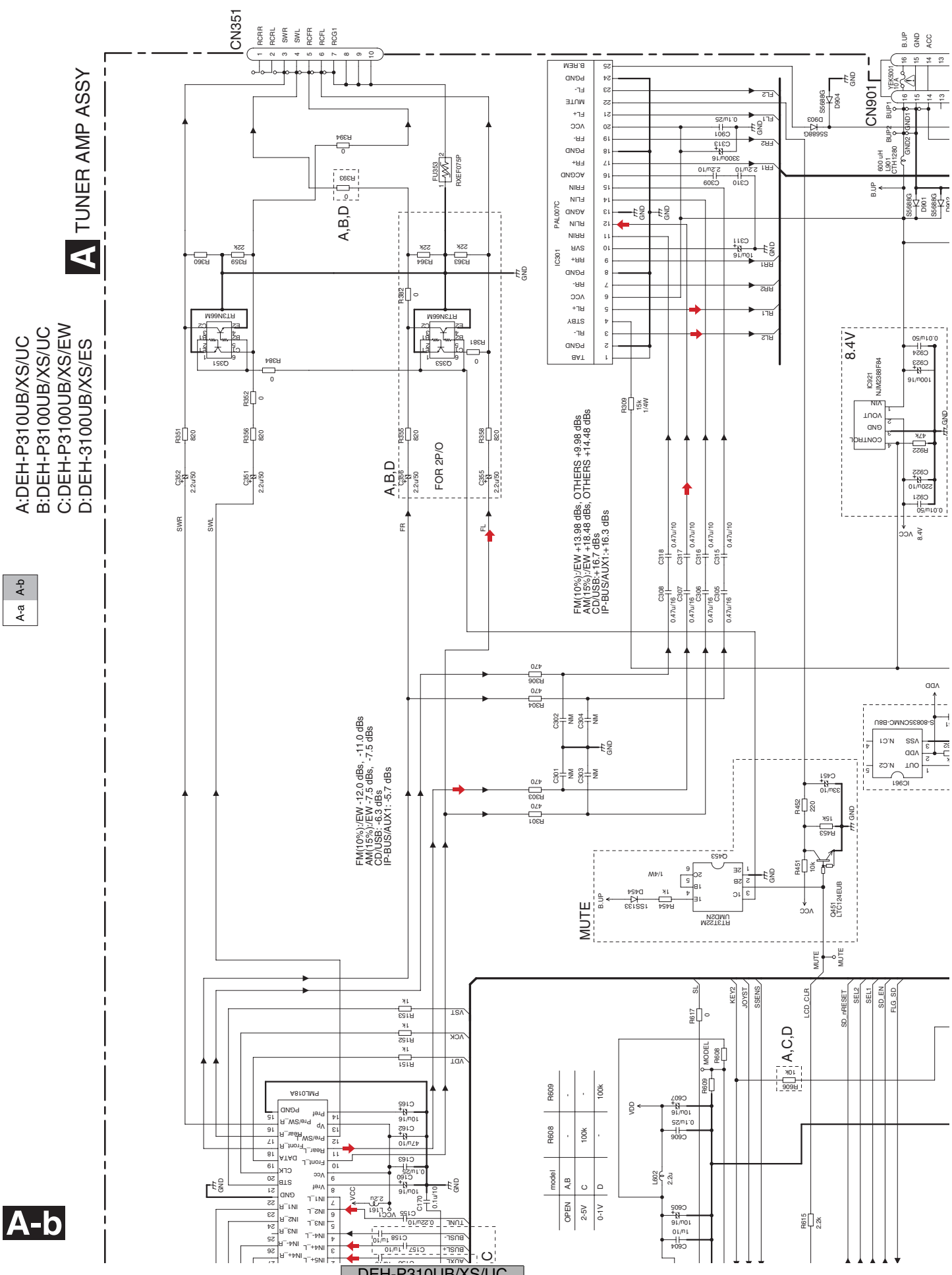
IP-BUS	101-120	UCOM	601-620
EVOL	151-170	SD UNIT	650-670
		SD_VDD	670-700
		CD MECHA	701-750
USB	251-260	GRILL	801-860
AMP	301-350	B.UP	901-910
RCA	351-400	POWER	911-929
TUNER	401-450	ASENS BSENS	931-940
MUTE	451-500	TELMUTE	951-960
USB5V	501-520	RST	961-970
A.ANT	551-560		

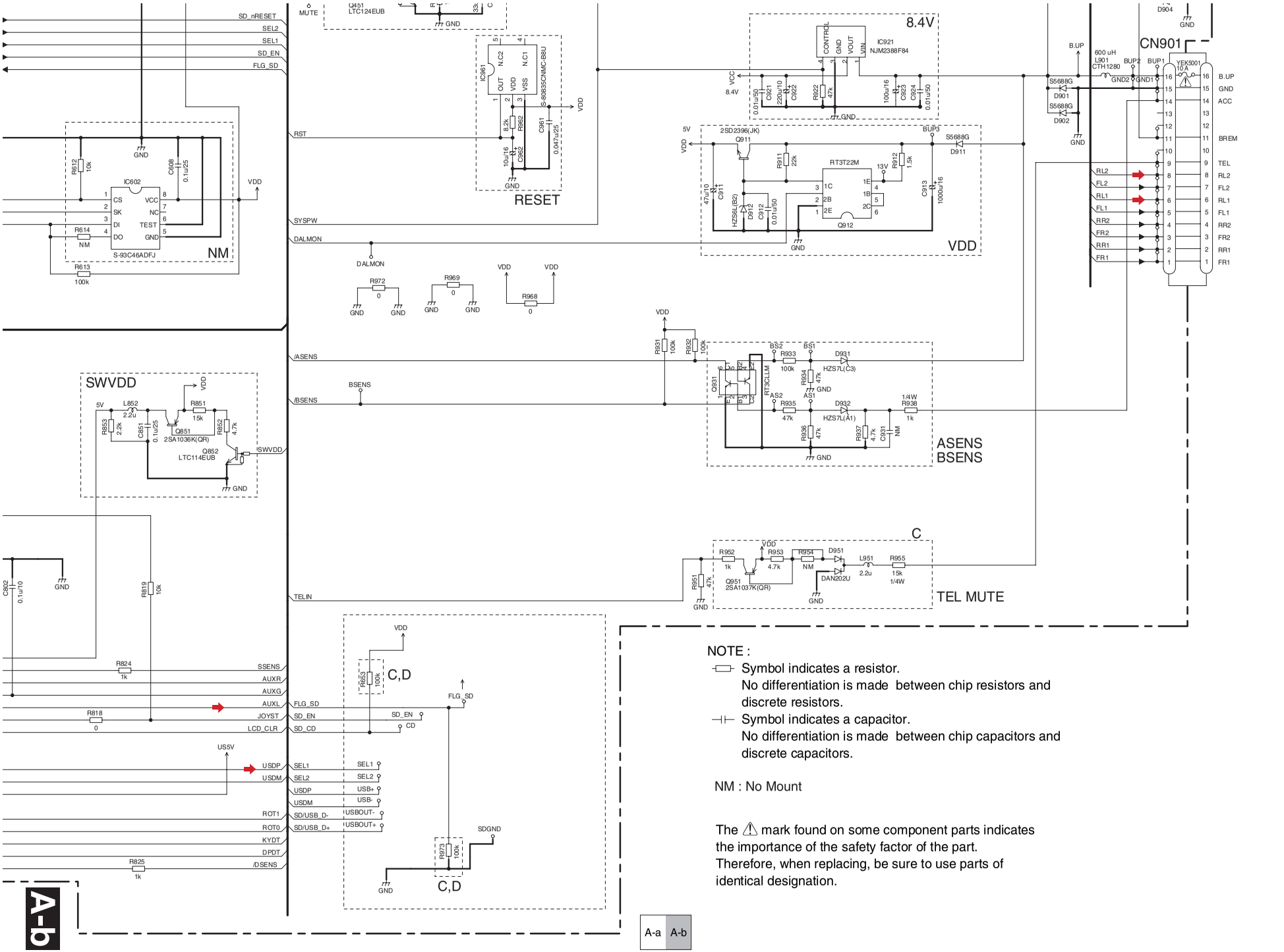
A-b

A:DEH-P310UB/XS/UC
B:DEH-P3100UB/XS/UC
C:DEH-P3100UB/XS/EW
D:DEH-3100UB/XS/ES

A TUNER AMP ASSY




A TUNER AMP ASSY
A:DEH-P310UB/XS/UC
B:DEH-P3100UB/XS/UC
C:DEH-P3100UB/XS/EW
D:DEH-3100UB/XS/ES
A-b
A-a
CN351
CN901
A,B,D
FOR 2P/O
FM(10%):/EW +13.98 dBs, OTHERS +9.98 dBs
AM(15%):/EW +18.48 dBs, OTHERS +14.48 dBs
CD/USB:+16.7 dBs
IP-BUS/AUX1:+16.3 dBs
FM(10%):/EW -12.0 dBs, -11.0 dBs
AM(15%):/EW -7.5 dBs, -7.5 dBs
CD/USB: -6.3 dBs
IP-BUS/AUX1: -5.7 dBs
MUTE
A,C,D
8.4V
model
OPEN
2-5V
0-1V
A-b
DEH-P310UB/XS/UC
58

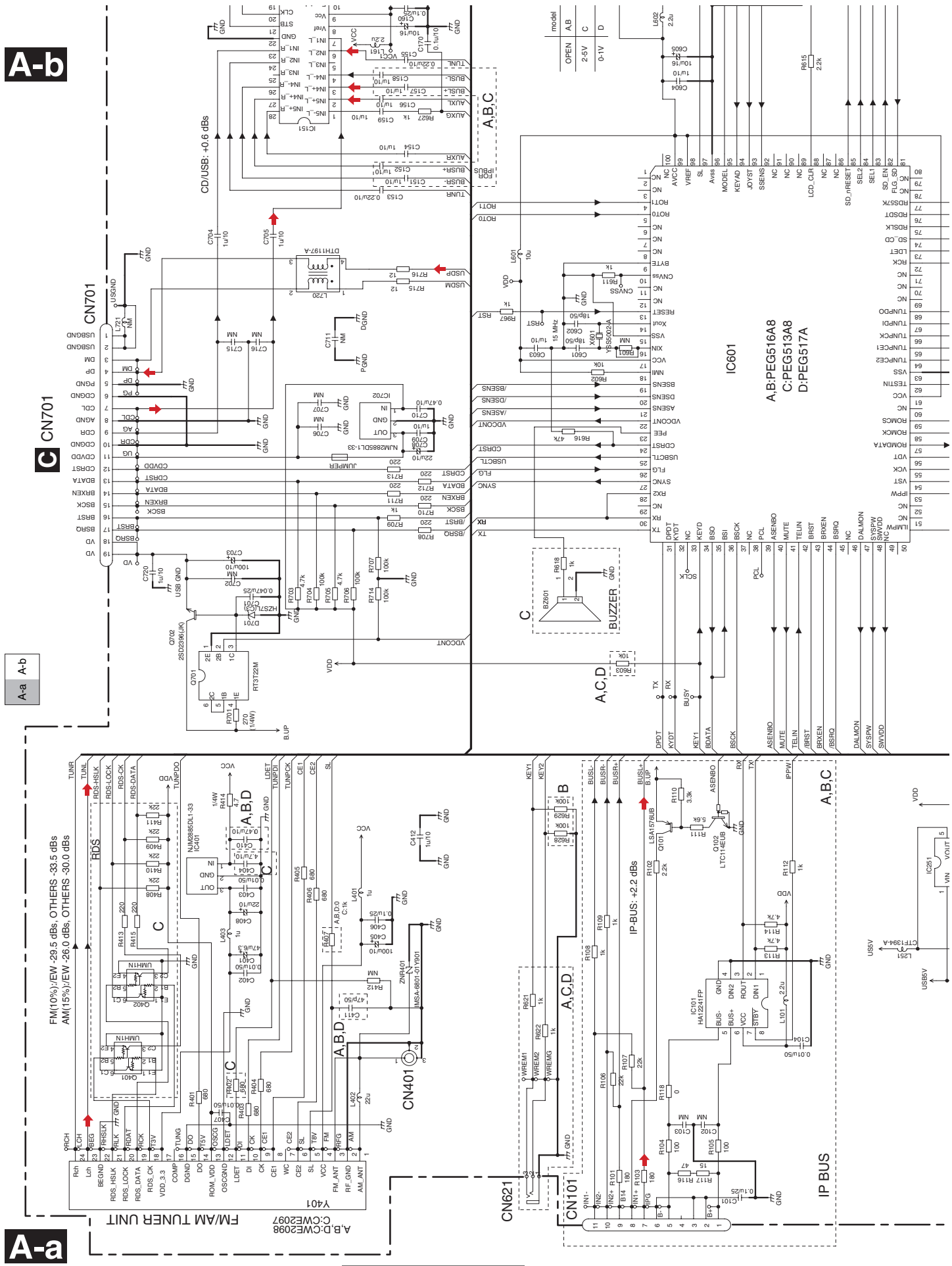


NOTE :

- Symbol indicates a resistor.
  No differentiation is made between chip resistors and discrete resistors.
- Symbol indicates a capacitor.
  No differentiation is made between chip capacitors and discrete capacitors.

NM : No Mount

The ⚠ mark found on some component parts indicates the importance of the safety factor of the part.
Therefore, when replacing, be sure to use parts of identical designation.


A-b
A-a
CN701
IC601
A,B:PEG516A8
C:PEG513A8
D:PEG517A
CD/USB: +0.6 dBs
BUZZER
FM/AM TUNER UNIT
A,B,D:CWE2098
C:CWE2097
IP BUS
IP-BUS: +2.2 dBs
FM(10%)/EW -29.5 dBs, OTHERS -33.5 dBs
AM(15%)/EW -26.0 dBs, OTHERS -30.0 dBs
DEH-P310UB/XS/UC
60

A-b

A-a

IP-BUS	UCOM	601-620
EVOL	SD UNIT	650-670
	SD_VDD	670-700
	CD MECHA	701-750
	GRILL	801-860
USB	B.UP	901-910
AMP	POWER	911-929
RCA	ASENS BSENS	931-940
TUNER	TELMUTE	951-960
MUTE	RST	961-970
USB5V		
A.ANT		

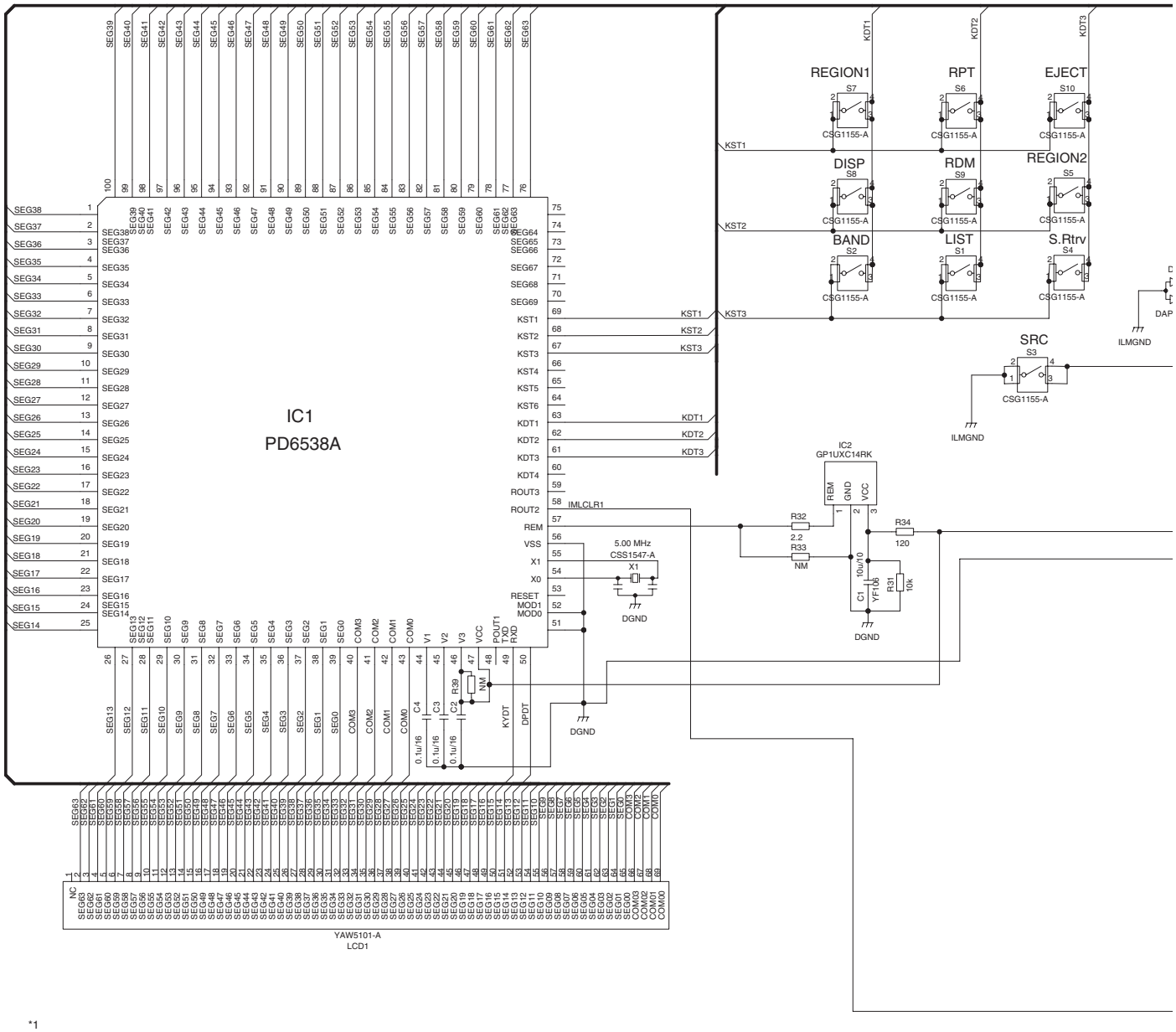
DEH-	P310UB	P3100UB	P3100UB	3100UB
	/P.U/C	/UC	/EW5	/ES
RDS	—	—	x	—
AUX IN	FRONT	FRONT	FRONT	FRONT
W.REM	x	—	x	x
IP-BUS	x	x	x	—
A.ANT	—	—	—	—
TEL IN	—	—	x	—
SD Unit	—	—	—	—
RCA	2P/O	2P/O	P/O	2P/O
CD/MECHA	IPOD			
USB	FRONT			

10.2 KEYBOARD UNIT

BUTTON

model	REGION1	REGION2
A,B,D	CLOCK/ DISP OFF	SW/BASS
C	TA/NEWS	MUTE

B KEYBOARD UNIT

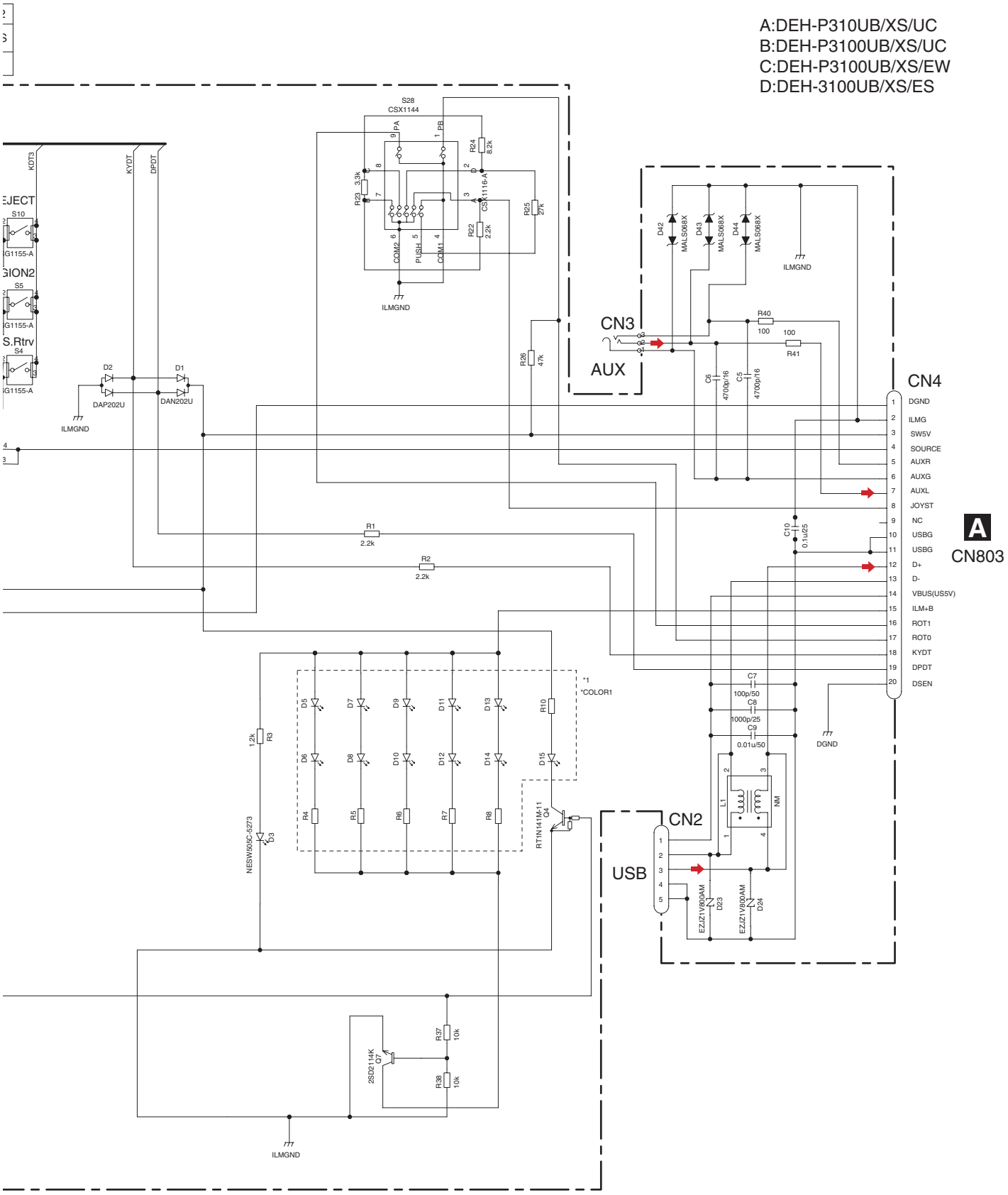


*1

	A:DEH-P310UB/XS/UC B:DEH-P3100UB/XS/UC	C:DEH-P3100UB/XS/EW	D:DEH-3100UB/XS/ES
D5-D15	CL-195PG-CD(GREEN)	CL-195SR-CD(RED)	CL-197HB1-D(CDE)
R4-R8	RS1/4SA681J	RS1/4SA122J	RS1/4SA392J
R10	RS1/16S181J	RS1/16S331J	RS1/16S102J

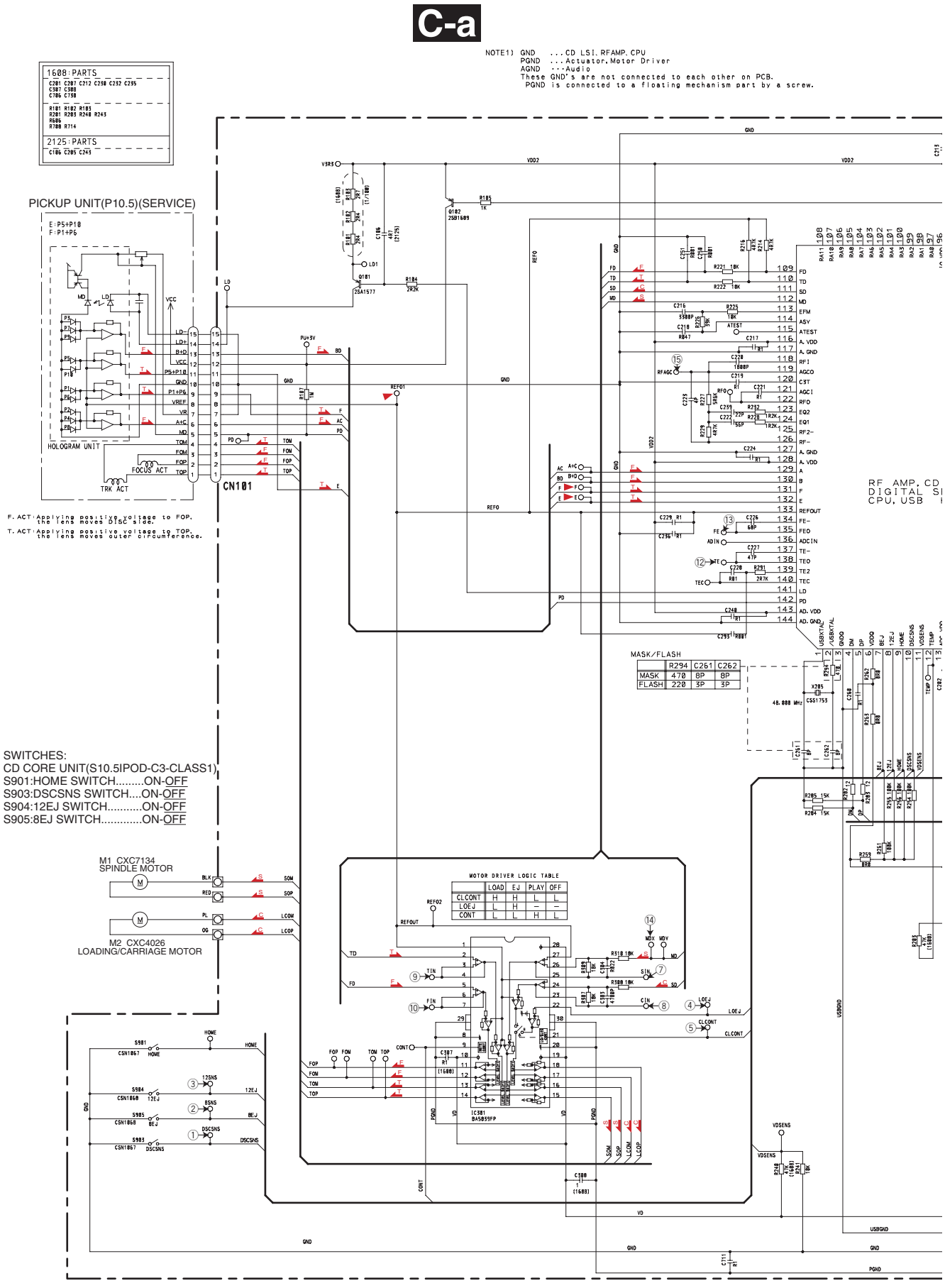
SW	SW(V) OVER-UNDER
A(UP)	0.00-0.50
B(LEFT)	0.50-1.30
C(DOWN)	1.30-2.30
D(RIGHT)	2.30-3.70
PUSH	3.70-4.50
RELEASE	4.50-5.00

A:DEH-P310UB/XS/UC
B:DEH-P3100UB/XS/UC
C:DEH-P3100UB/XS/EW
D:DEH-3100UB/XS/ES



B

10.3 CD MECHANISM MODULE(GUIDE PAGE)



Monitor land(ø1.2mm)
#:Monitor land(ø0.8mm)
Land for manual soldering

C CD CORE UNIT(S10.5iPod-C3-CLASS1)

SIGNAL LINE
FOCUS LINE
TRACKING LINE
CARRIAGE LINE
SPINDLE LINE

IC201
PE5661A

RF AMP, CD DECODER, MP3&WMA DECODER
DIGITAL SERVO/DATA PROCESSOR
CPU, USB HOST CONTROLLER

IC205
341S2159

CN701

C-b

C-a C-b

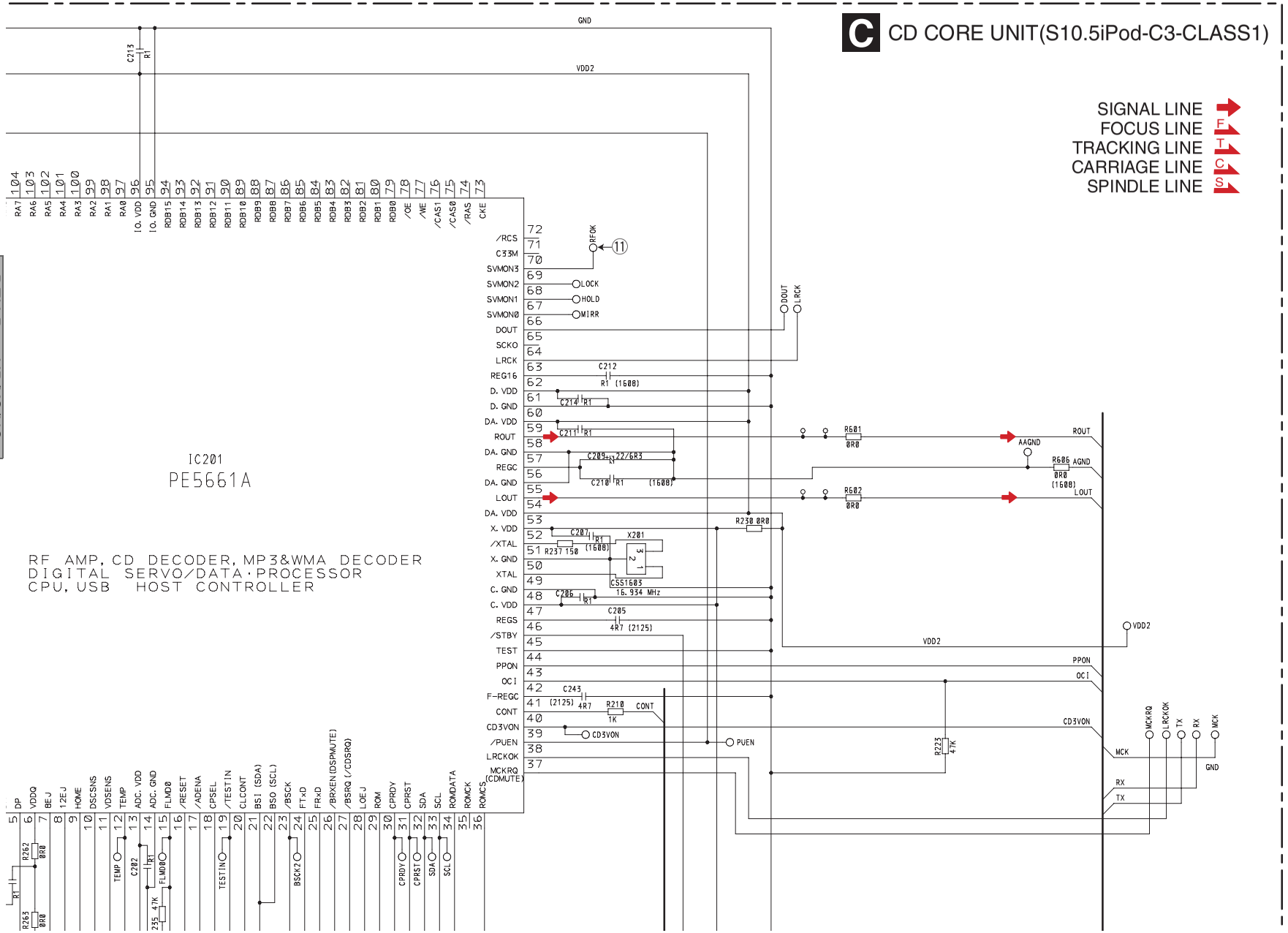
Ⓑ Monitor land(φ1.2mm)
#:Monitor land(φ0.8mm)
◯ Land for manual soldering

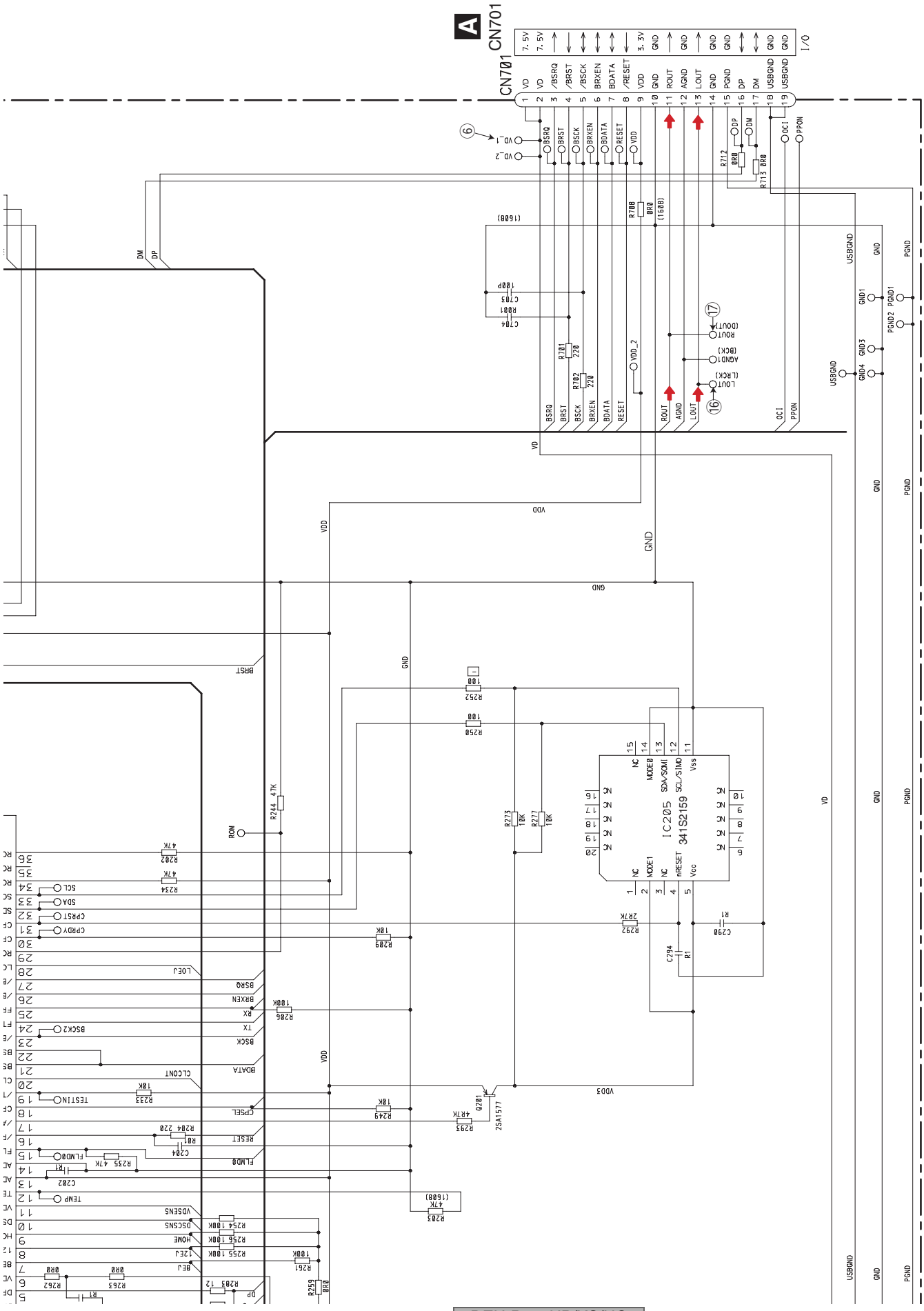
C CD CORE UNIT(S10.5iPod-C3-CLASS1)

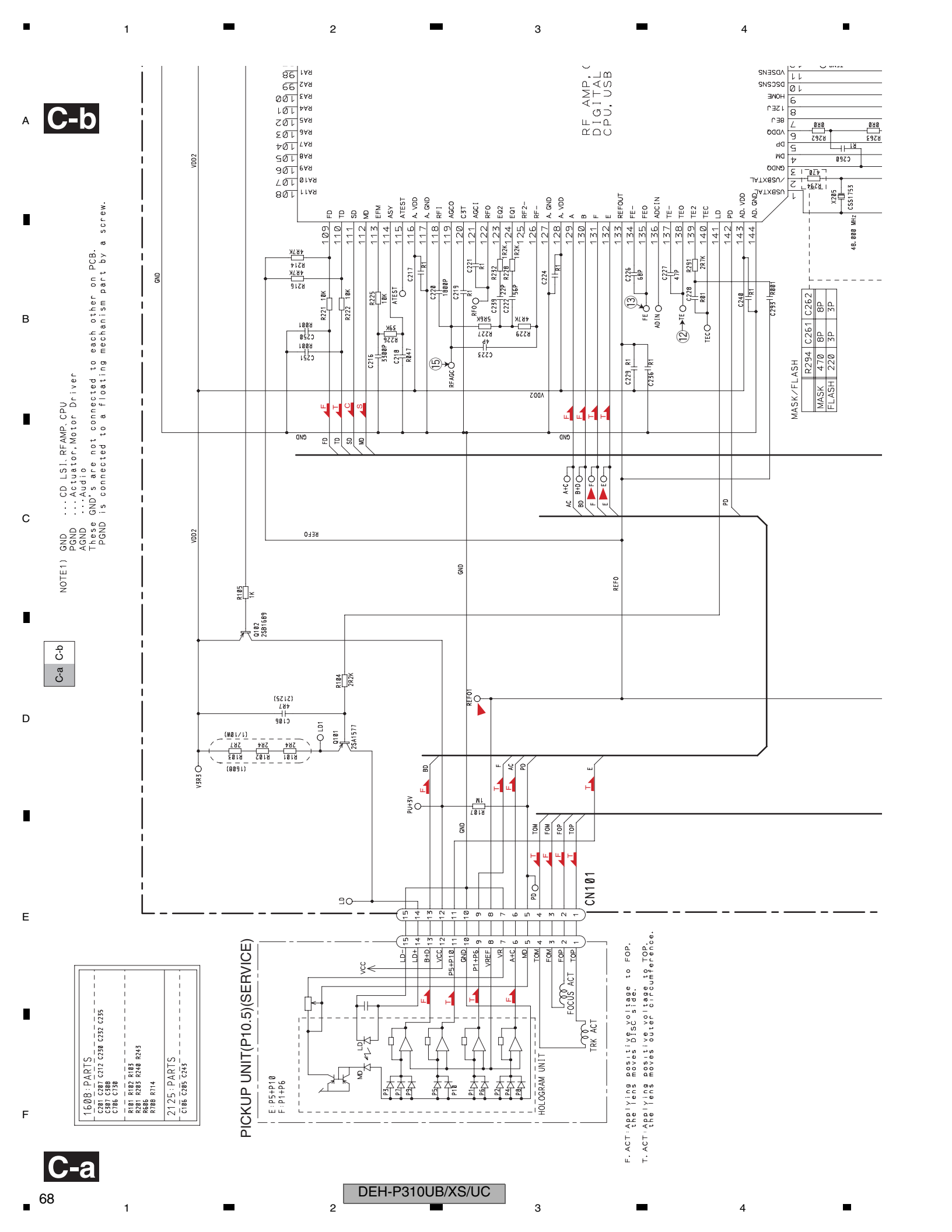
SIGNAL LINE
FOCUS LINE
TRACKING LINE
CARRIAGE LINE
SPINDLE LINE

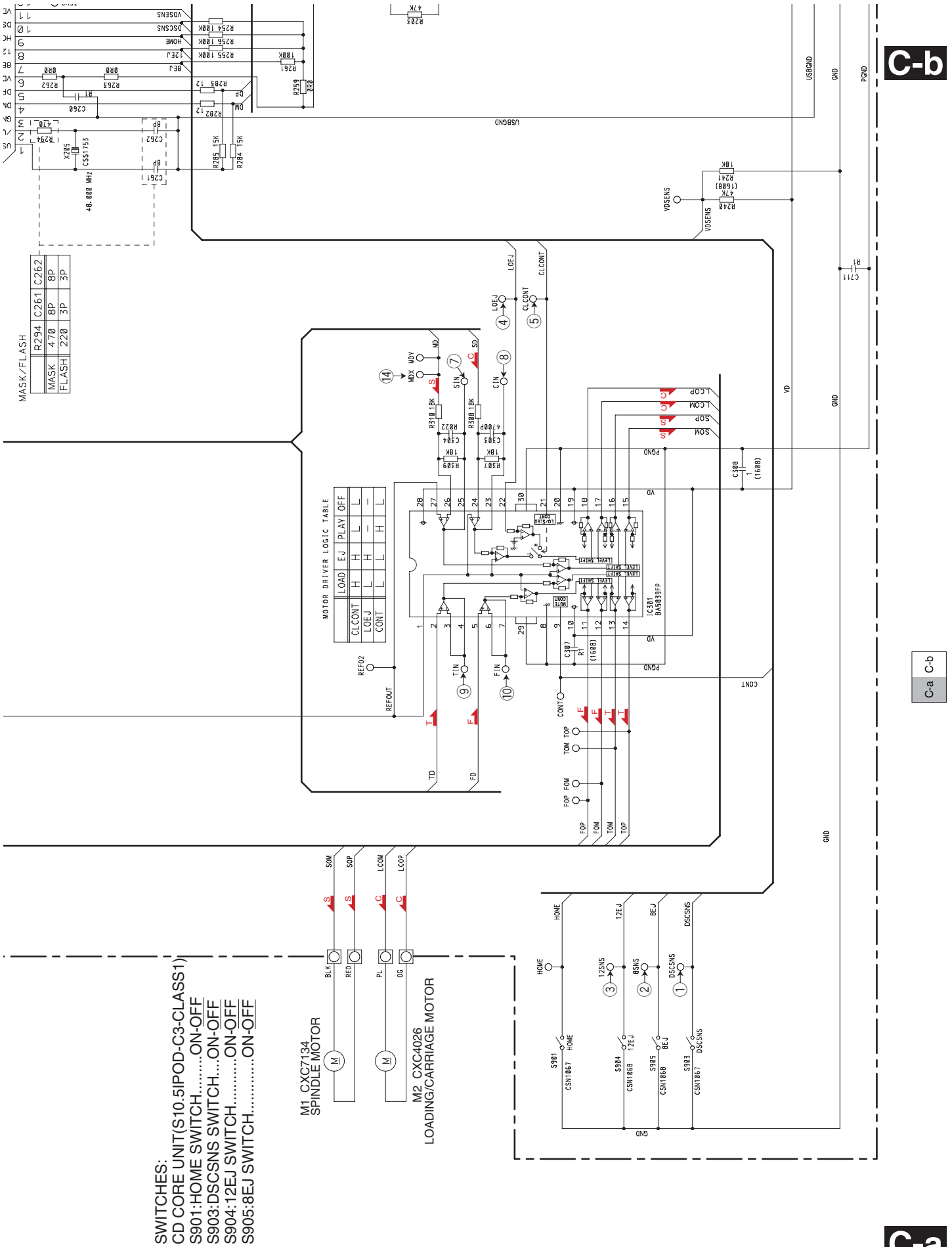
IC201
PE5661A

RF AMP, CD DECODER, MP3&WMA DECODER
DIGITAL SERVO/DATA·PROCESSOR
CPU, USB HOST CONTROLLER




CN701
I/O
7.5V
7.5V
3.3V
GND
VD
/BSRQ
/BRST
/BSCK
BRXEN
BDATA
/RESET
ROUT
AGND
LOUT
PGND
DP
DM
USBGND
PPON
BSRQ
BRST
BSCK
BRXEN
BDATA
RESET
VDD_2
(DOUT)
(BCK)
(LRCK)
IC205
341S2159
SDA/SOMI
SCL/SIMO
Vss
mRESET
Vcc
MODE0
MODE1
NC
GND1
GND2
GND3
GND4
PGND1
PGND2
TESTIN
FLMD0
TEMP
VDSENS
DSCSNS
HOME
BCLJ
12CLJ
LOEJ
CLCONT
CPRDY
CPRST
SCL
SDA
BSCK2
CFSEL
RESET
ROM
Q201
2SA1577
C-a
C-b
C-b


C-b
C-a C-b
NOTE1) GND ...CD LSI,RFAMP,CPU
PGND ...Actuator,Motor Driver
AGND ...Audio
These GND's are not connected to each other on PCB.
PGND is connected to a floating mechanism part by a screw.
RF AMP, DIGITAL CPU, USB
MASK/FLASH
R294 C261 C262
MASK 470 8P 8P
FLASH 220 3P 3P
CN101
PICKUP UNIT(P10.5)(SERVICE)
E:P5+P10
F:P1+P6
HOLOGRAM UNIT
F. ACT:Applying positive voltage to FOP, the lens moves DISC side.
T. ACT:Applying positive voltage to TOP, the lens moves outer circumference.
1608:PARTS
C201 C207 C212 C230 C232 C235 C307 C308 C706 C730
R101 R102 R103 R201 R202 R203 R240 R243 R606 R708 R714
2125:PARTS
C106 C205 C243
C-a
DEH-P310UB/XS/UC
68


C-b
C-a C-b
C-a
MASK/FLASH
MOTOR DRIVER LOGIC TABLE
IC301 BA5839FP
M1 CXC7134 SPINDLE MOTOR
M2 CXC4026 LOADING/CARRIAGE MOTOR
SWITCHES:
CD CORE UNIT(S10.5IPOD-C3-CLASS1)
S901:HOME SWITCH.....ON-OFF
S903:DSCSNS SWITCH....ON-OFF
S904:12EJ SWITCH.....ON-OFF
S905:8EJ SWITCH.....ON-OFF

10.4 WAVEFORMS

● CD CORE UNIT

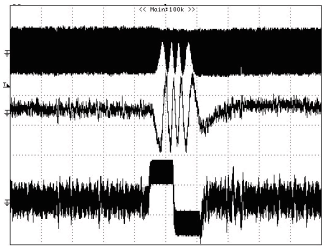
Note : 1. The encircled numbers denote measuring points in the circuit diagram.
2. Reference voltage REFO1(1.65 V)

①DSCSNS 5 V/div 500 ms/div ②8SNS 5 V/div ③12SNS 5 V/div ④LOEJ 5 V/div 12 cm CD Loading operation Ref.: GND Mode: Normal	①DSCSNS 5 V/div 500 ms/div ⑤CLCONT 5 V/div ④LOEJ 5 V/div ⑥VD 10 V/div 12 cm CD Loading operation Ref.: GND Mode: Normal	①DSCSNS 5 V/div 500 ms/div ②8SNS 5 V/div ③12SNS 5 V/div ④LOEJ 5 V/div 8 cm CD Loading operation Ref.: GND Mode: Normal
⑦SIN 1 V/div 1 s/div ⑧CIN 500 mV/div ⑨TIN 1 V/div 12 cm CD-DA setup operation after loading Ref.: REFO Mode: Normal	⑩FIN 200 mV/div 500 ms/div ⑪RFOK(MONI_3) 2 V/div ⑦SIN 2 V/div 12 cm CD-DA Source On setup operation Ref.: REFO Mode: Normal	⑫TE 500 mV/div 200 ms/div ⑬FE 500 mV/div Source On setup operation Ref.: REFO Mode: Normal
⑬FE 500 mV/div 20 ms/div ⑩FIN 500 mV/div ⑫TE 500 mV/div ⑨TIN 500 mV/div CD-DA Play operation Ref.: REFO Mode: Normal	⑭MDX 2 V/div 200 ms/div ⑦SIN 500 mV/div Spindle waveform during play operation Ref.: REFO Mode: Normal	⑭MDX 2 V/div 5 µs/div ⑦SIN 500 mV/div Spindle waveform during play operation (Wider) Ref.: REFO Mode: Normal
⑩FIN 500 mV/div 200 ms/div ⑬FE 500 mV/div Focus Search waveform Ref.: REFO Mode: TEST	⑫TE 500 mV/div 2 ms/div ⑮RFAGC 500 mV/div Track Open waveform Ref.: REFO Mode: TEST	⑮RFAGC 1 V/div 500 µs/div ⑫TE 500 mV/div ⑨TIN 500 mV/div 1 Track Jump waveform Ref.: REFO Mode: TEST

⑮RFAGC	1 V/div	500 µs/div
⑫TE	500 mV/div	
⑨TIN	500 mV/div	

4 Tracks Jump waveform

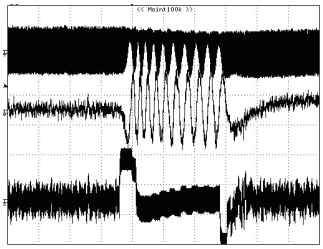
Ref.: REFO
Mode: TEST



⑮RFAGC	1 V/div	500 µs/div
⑫TE	500 mV/div	
⑨TIN	500 mV/div	

10 Tracks Jump waveform

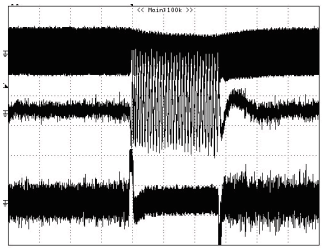
Ref.: REFO
Mode: TEST



⑮RFAGC	1 V/div	2 ms/div
⑫TE	500 mV/div	
⑨TIN	500 mV/div	

32 Tracks Jump waveform

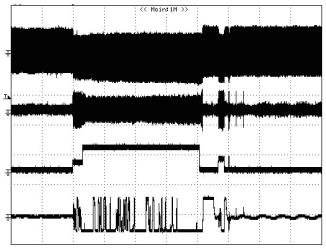
Ref.: REFO
Mode: TEST



⑮RFAGC	1 V/div	200 ms/div
⑫TE	1 V/div	
⑧CIN	1 V/div	
⑦SIN	2 V/div	

Search operation(Outter to Inner)

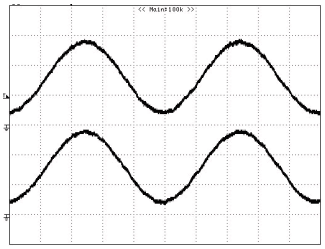
Ref.: REFO
Mode: Normal



⑯LOUT	1 V/div	200 µs/div
⑰ROUT	1 V/div	

Analog audio waveform

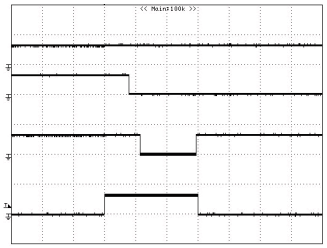
Ref.: AGND
Mode: Normal



①DSCSNS	5 V/div	500 ms/div
②8SNS	5 V/div	
③12SNS	5 V/div	
④LOEJ	5 V/div	

12 cm CD Eject operation

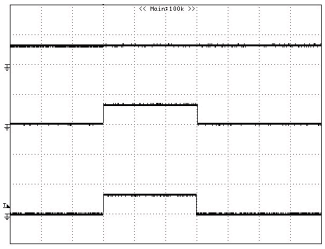
Ref.: GND
Mode: Normal



①DSCSNS	5 V/div	500 ms/div
⑤CLCONT	5 V/div	
④LOEJ	5 V/div	

12 cm CD Eject operation

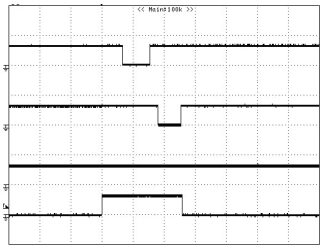
Ref.: GND
Mode: Normal



①DSCSNS	5 V/div	500 ms/div
②8SNS	5 V/div	
③12SNS	5 V/div	
④LOEJ	5 V/div	

8 cm CD Eject operation

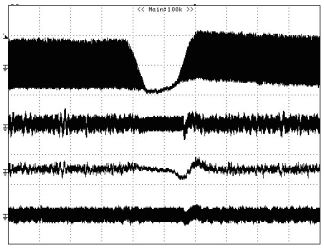
Ref.: GND
Mode: Normal



⑮RFAGC	1 V/div	500 µs/div
⑨TIN	1 V/div	
⑫TE	1 V/div	
⑩FIN	1 V/div	

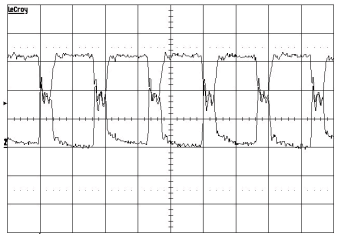
Black dot(800 µm) during play

Ref.: REFO
Mode: Normal



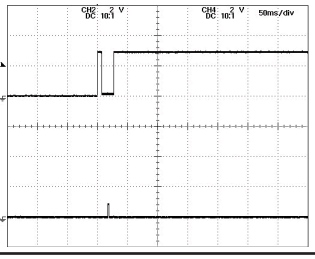
⑱DP	1 V/div	50 ns/div
⑲DM	1 V/div	

USB Play



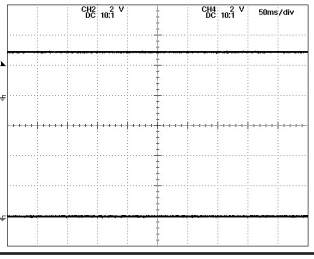
⑱DP	2 V/div	50 ms/div
⑲DM	2 V/div	

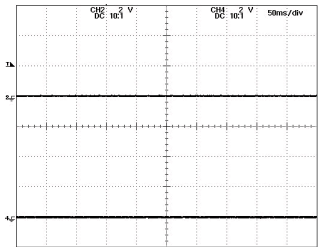
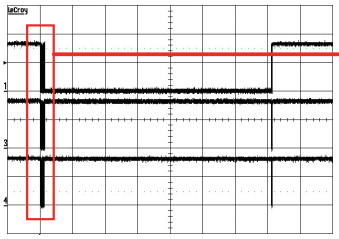
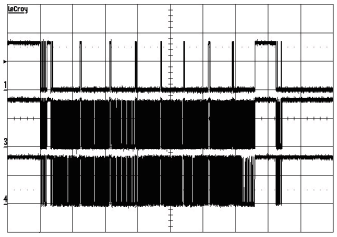
USB device inserting to USB connector.



⑱DP	2 V/div	50 ms/div
⑲DM	2 V/div	

CD Play with USB(iPod) device connecting.



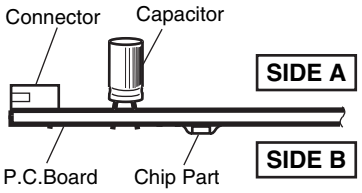
⑱DP 2 V/div 50 ms/div ⑲DM 2 V/div ACC OFF with USB(iPod) device connecting. 	⑳CPRDY 2 V/div 10 s/div ㉑SDA 2 V/div ㉒SCL 2 V/div iPod Authentication Operation 	⑳CPRDY 2 V/div ㉑SDA 2 V/div ㉒SCL 2 V/div iPod Authentication Operation(zoom until 2 s) 

11. PCB CONNECTION DIAGRAM

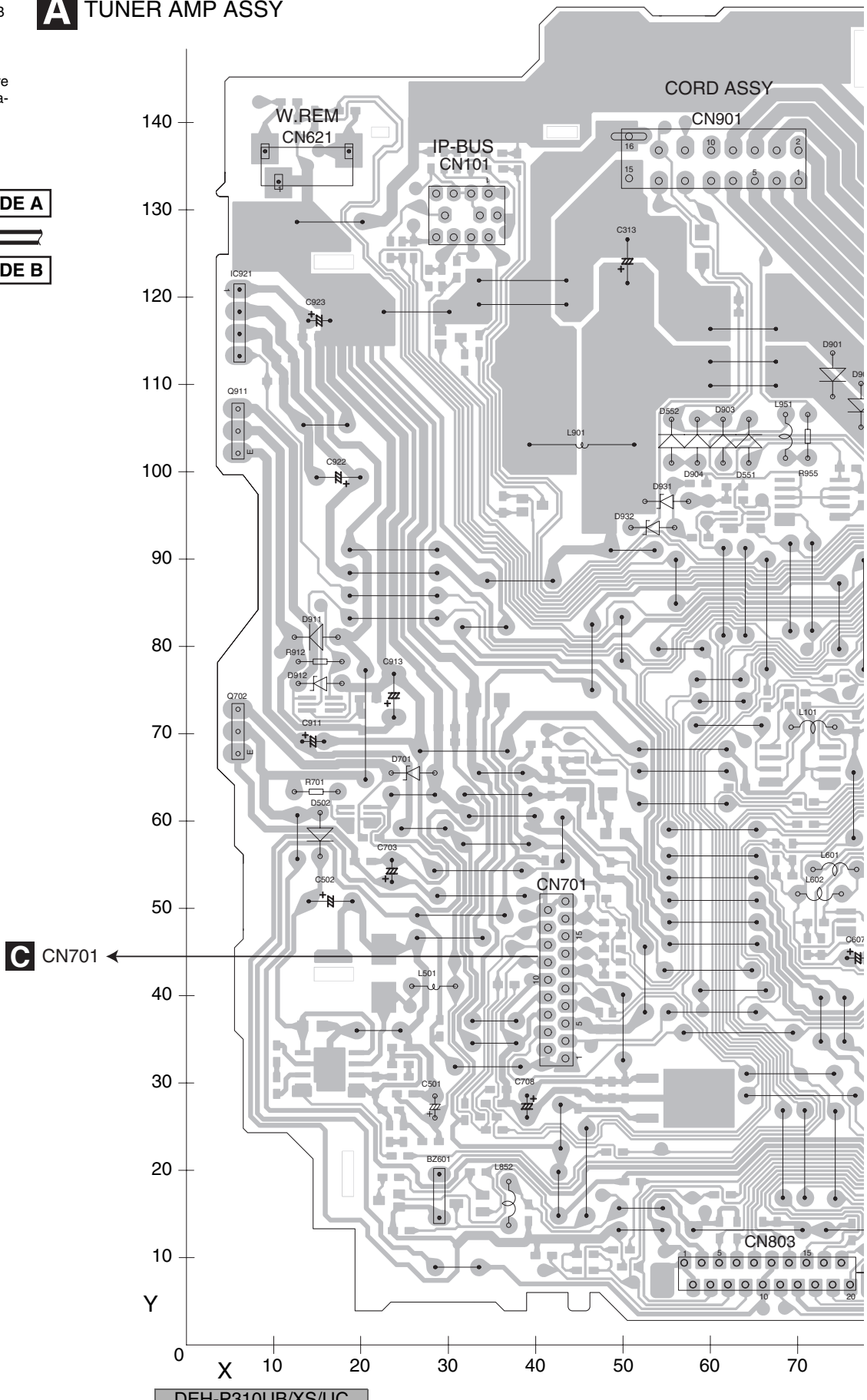
11.1 TUNER AMP ASSY

NOTE FOR PCB DIAGRAMS

1. The parts mounted on this PCB include all necessary parts for several destination. For further information for respective destinations, be sure to check with the schematic diagram.
2. Viewpoint of PCB diagrams



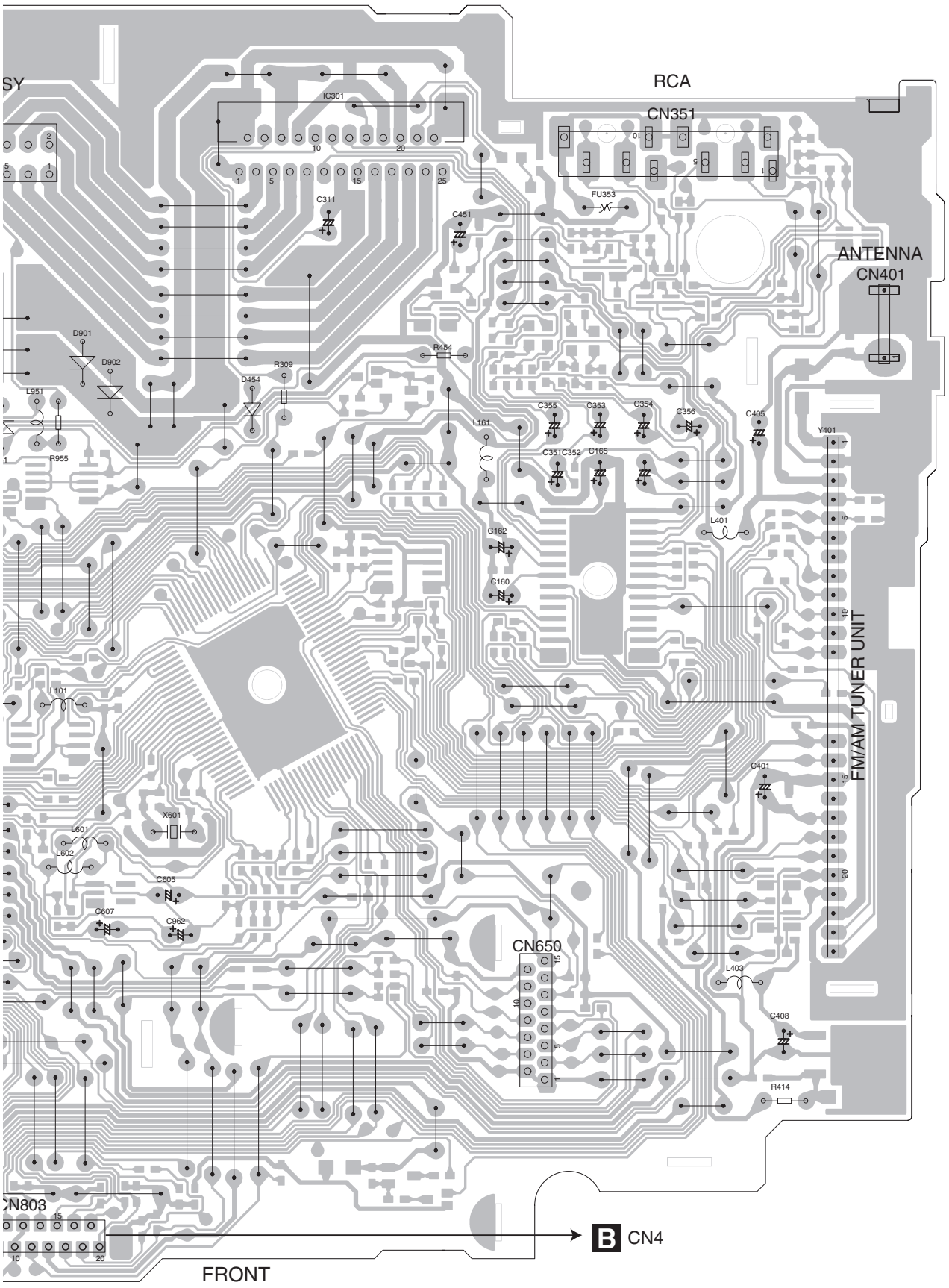
A TUNER AMP ASSY



C CN701

A

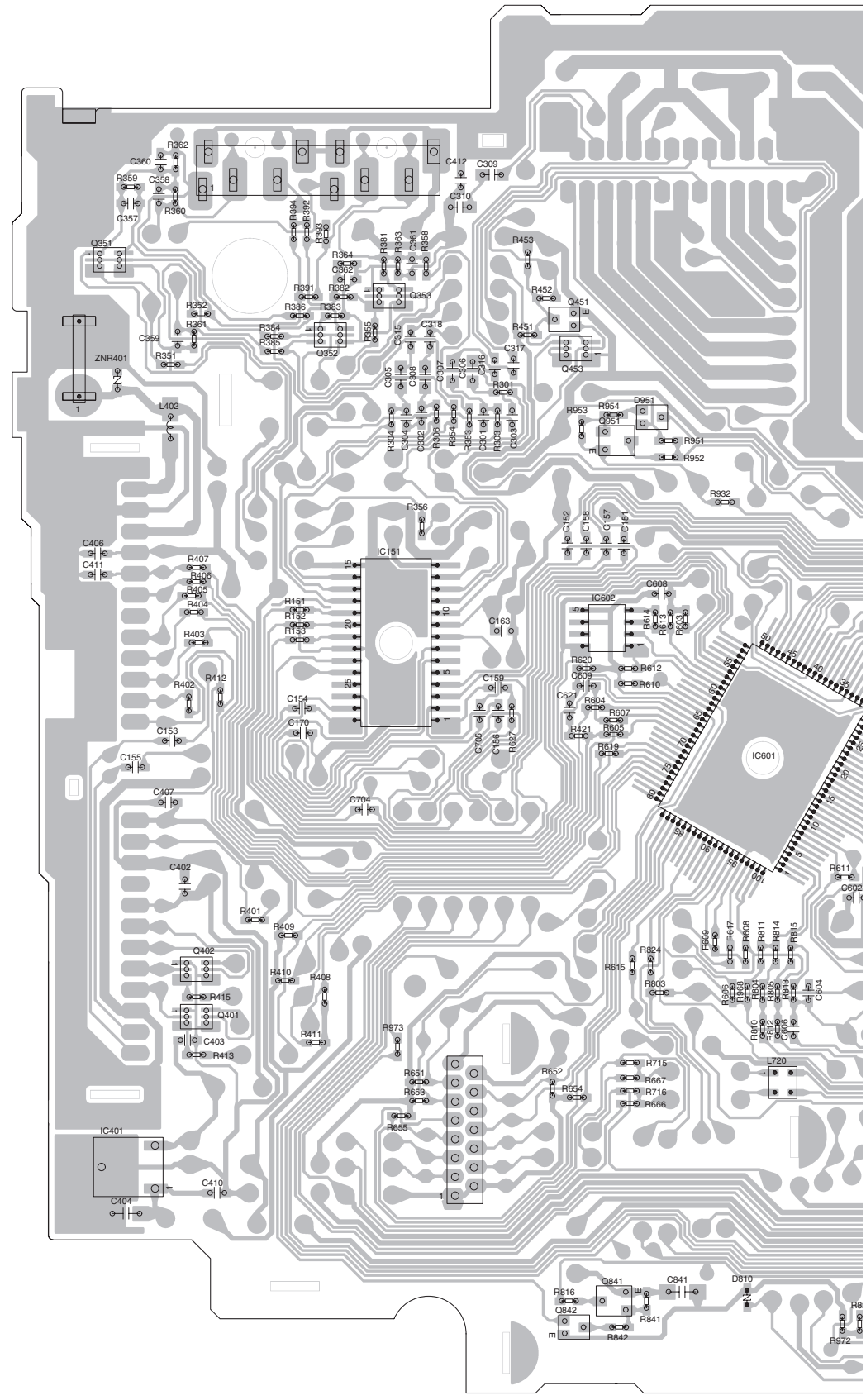
SIDE A



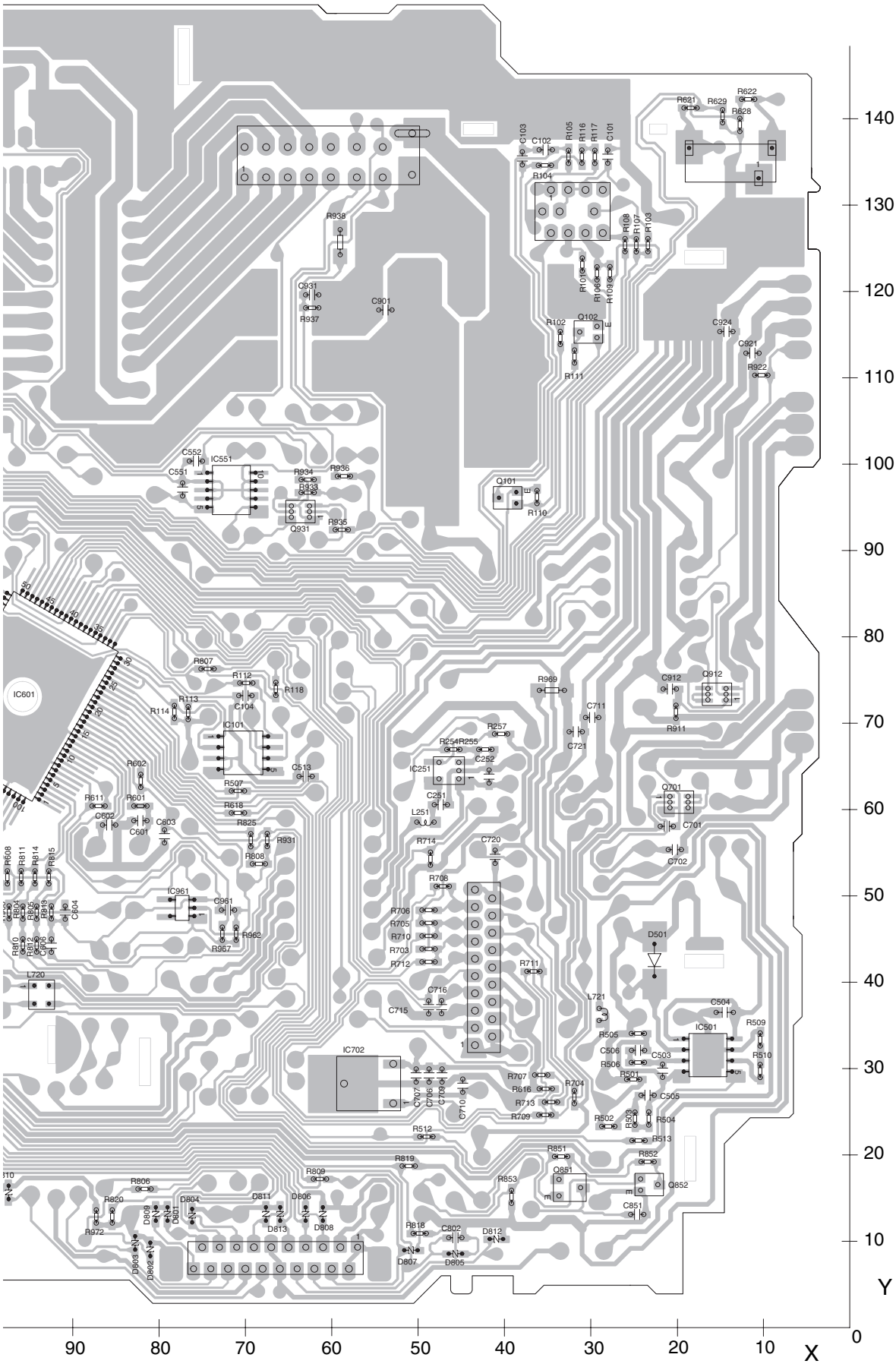
A

DEH-P310UB/XS/UC

A TUNER AMP ASSY



SIDE B

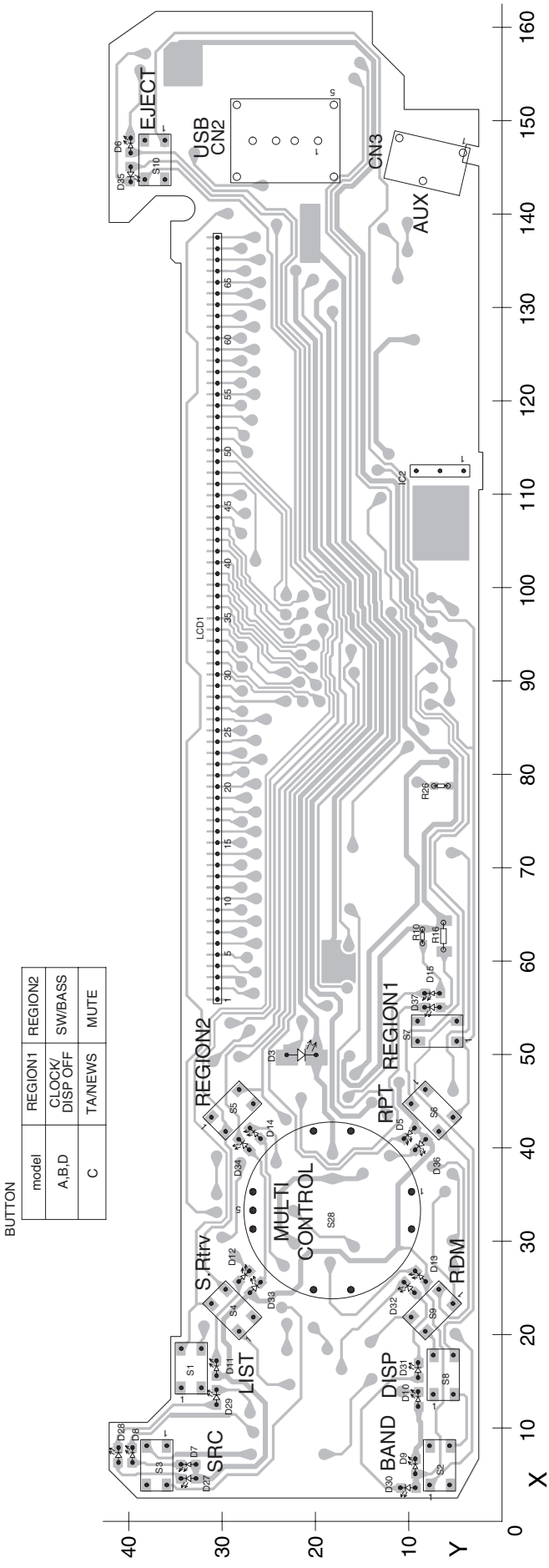

IC601
IC101
IC551
IC961
IC702
IC501
Q101
Q102
Q851
Q852
Q931
Q701
D501
L720
L721
L251
IC251
C104
C513
C602
C601
C603
C961
C715
C716
C720
C721
C702
C912
C504
C505
C503
C851
C802
R112
R113
R114
R118
R807
R602
R611
R601
R618
R825
R931
R808
R962
R967
R714
R708
R706
R705
R710
R703
R712
R711
R969
R911
R509
R510
R505
R506
R501
R502
R504
R513
R512
R819
R809
R806
R820
R972
R853
R851
R852
R707
R616
R713
R709
R704
R938
R937
R934
R933
R936
R935
R104
R105
R116
R117
R101
R106
R109
R108
R107
R103
R102
R111
R110
R621
R629
R628
R622
R924
R921
R922
R912
R257
R254
R255
R252
R251
R507
R611
R614
R615
R608
R604
R605
R606
R610
R612
R613
C552
C551
C931
C901
C103
C102
C101
C924
D804
D811
D806
D809
D801
D813
D808
D803
D802
D807
D805
D812
Y
X
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140

11.2 KEYBOARD UNIT

B KEYBOARD UNIT

A:DEH-P310UB/XS/UC
B:DEH-P3100UB/XS/UC
C:DEH-P3100UB/XS/EW
D:DEH-3100UB/XS/ES

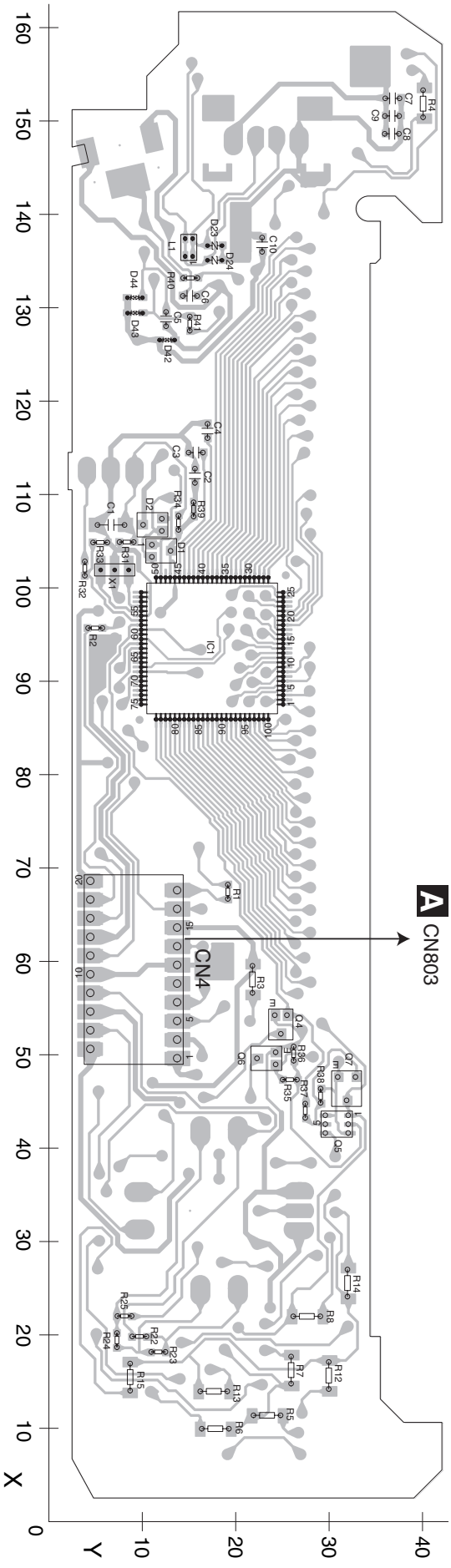
SIDE A



DEH-P310UB/XS/UC

B KEYBOARD UNIT

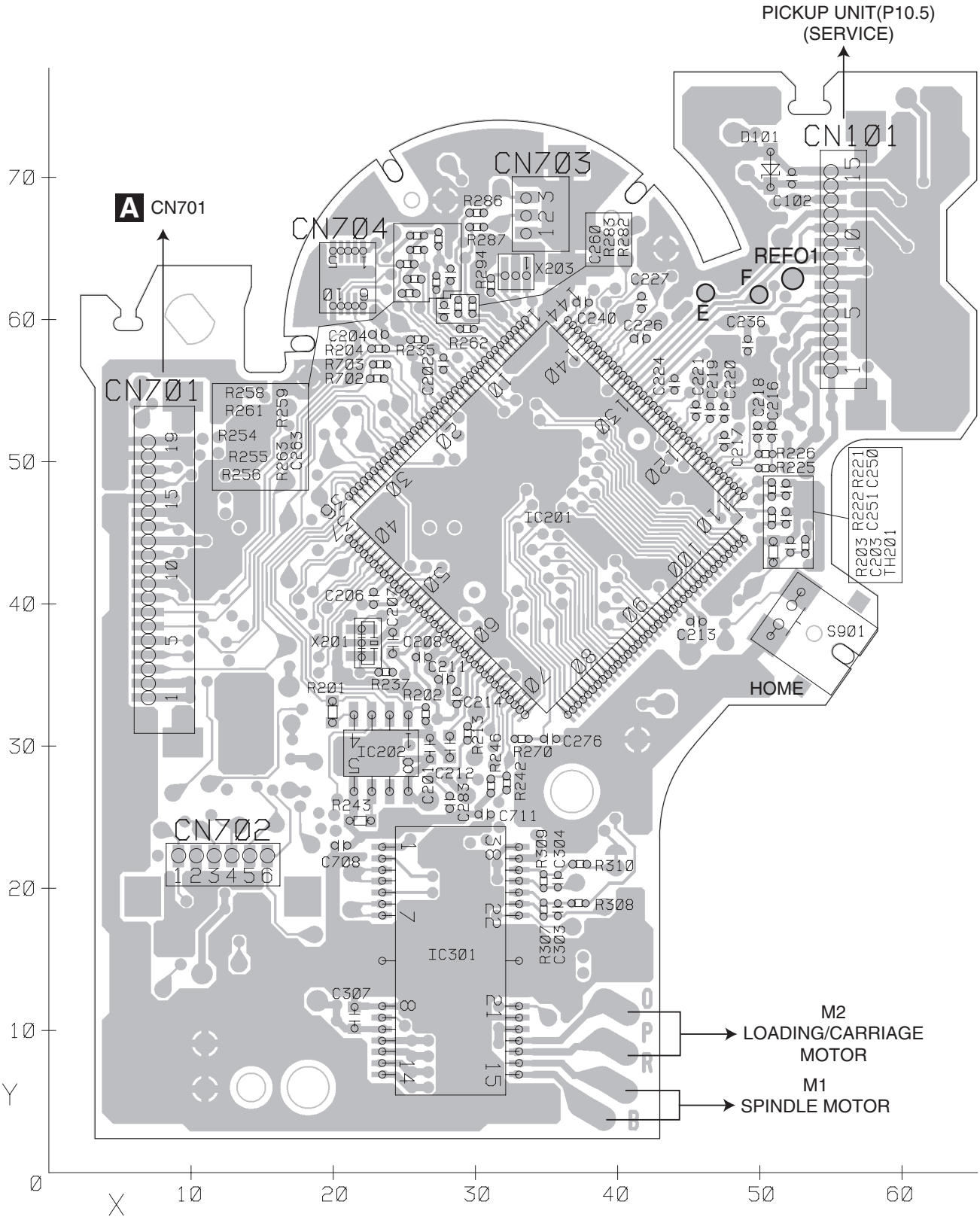
SIDE B



B

11.3 CD CORE UNIT(S10.5iPod-C3-CLASS1)

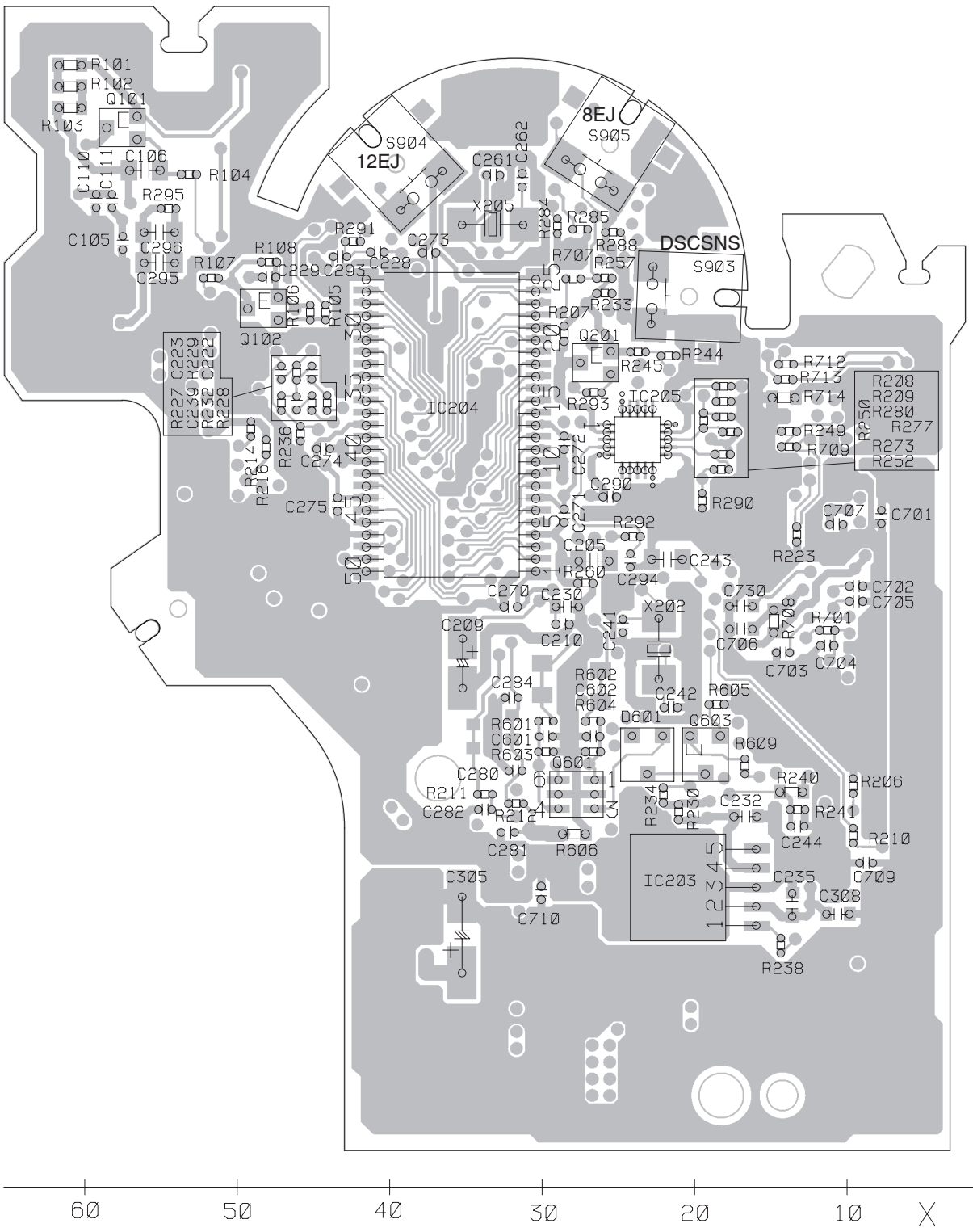
C CD CORE UNIT(S10.5iPod-C3-CLASS1) **SIDE A**



C

C CD CORE UNIT(S10.5iPod-C3-CLASS1)

SIDE B


R101
R102
Q101
R103
C110
C111
C106
R104
R295
C105
C296
C295
R107
R108
C229
C293
C228
R291
C273
S904
12EJ
C261
C262
X205
R284
R285
8EJ
S905
DSCSNS
S903
R707
R257
R288
R233
R207
Q201
R244
R245
R712
R713
R714
R208
R209
R280
R277
R250
R249
R709
R273
R252
R290
C707
C701
C702
C705
R223
C730
R708
R701
C706
C703
C704
X202
C242
R605
D601
Q603
R609
R240
R206
R241
C244
R210
C709
C235
C308
R238
IC203
C232
R234
R230
C280
R211
C282
R212
C281
R606
C305
C710
R602
C602
R604
R601
C601
R603
Q601
C284
C209
C210
C241
C230
C270
C205
R260
C294
C243
R292
C271
C272
R293
IC205
C290
IC204
C275
C274
R236
R214
R216
R227
C223
R229
C239
R232
C221
R228
Q102
R106
R105
C220
C227
C215
C212
C211
C208
C207
C206
C204
C203
C202
C201
C216
C217
C218
C219
C222
C224
C225
C226
C231
C232
C233
C234
C235
C236
C237
C238
C240
C243
C244
C245
C246
C247
C248
C249
C250
C251
C252
C253
C254
C255
C256
C257
C258
C259
C260
C261
C262
C263
C264
C265
C266
C267
C268
C269
C270
C271
C272
C273
C274
C275
C276
C277
C278
C279
C280
C281
C282
C283
C284
C285
C286
C287
C288
C289
C290
C291
C292
C293
C294
C295
C296
C297
C298
C299
C300
C301
C302
C303
C304
C305
C306
C307
C308
C309
C310
C311
C312
C313
C314
C315
C316
C317
C318
C319
C320
C321
C322
C323
C324
C325
C326
C327
C328
C329
C330
C331
C332
C333
C334
C335
C336
C337
C338
C339
C340
C341
C342
C343
C344
C345
C346
C347
C348
C349
C350
C351
C352
C353
C354
C355
C356
C357
C358
C359
C360
C361
C362
C363
C364
C365
C366
C367
C368
C369
C370
C371
C372
C373
C374
C375
C376
C377
C378
C379
C380
C381
C382
C383
C384
C385
C386
C387
C388
C389
C390
C391
C392
C393
C394
C395
C396
C397
C398
C399
C400
C401
C402
C403
C404
C405
C406
C407
C408
C409
C410
C411
C412
C413
C414
C415
C416
C417
C418
C419
C420
C421
C422
C423
C424
C425
C426
C427
C428
C429
C430
C431
C432
C433
C434
C435
C436
C437
C438
C439
C440
C441
C442
C443
C444
C445
C446
C447
C448
C449
C450
C451
C452
C453
C454
C455
C456
C457
C458
C459
C460
C461
C462
C463
C464
C465
C466
C467
C468
C469
C470
C471
C472
C473
C474
C475
C476
C477
C478
C479
C480
C481
C482
C483
C484
C485
C486
C487
C488
C489
C490
C491
C492
C493
C494
C495
C496
C497
C498
C499
C500
C501
C502
C503
C504
C505
C506
C507
C508
C509
C510
C511
C512
C513
C514
C515
C516
C517
C518
C519
C520
C521
C522
C523
C524
C525
C526
C527
C528
C529
C530
C531
C532
C533
C534
C535
C536
C537
C538
C539
C540
C541
C542
C543
C544
C545
C546
C547
C548
C549
C550
C551
C552
C553
C554
C555
C556
C557
C558
C559
C560
C561
C562
C563
C564
C565
C566
C567
C568
C569
C570
C571
C572
C573
C574
C575
C576
C577
C578
C579
C580
C581
C582
C583
C584
C585
C586
C587
C588
C589
C590
C591
C592
C593
C594
C595
C596
C597
C598
C599
C600
C601
C602
C603
C604
C605
C606
C607
C608
C609
C610
C611
C612
C613
C614
C615
C616
C617
C618
C619
C620
C621
C622
C623
C624
C625
C626
C627
C628
C629
C630
C631
C632
C633
C634
C635
C636
C637
C638
C639
C640
C641
C642
C643
C644
C645
C646
C647
C648
C649
C650
C651
C652
C653
C654
C655
C656
C657
C658
C659
C660
C661
C662
C663
C664
C665
C666
C667
C668
C669
C670
C671
C672
C673
C674
C675
C676
C677
C678
C679
C680
C681
C682
C683
C684
C685
C686
C687
C688
C689
C690
C691
C692
C693
C694
C695
C696
C697
C698
C699
C700
C701
C702
C703
C704
C705
C706
C707
C708
C709
C710
R101
R102
R103
R104
R105
R106
R107
R108
R109
R110
R111
R112
R113
R114
R115
R116
R117
R118
R119
R120
R121
R122
R123
R124
R125
R126
R127
R128
R129
R130
R131
R132
R133
R134
R135
R136
R137
R138
R139
R140

12. ELECTRICAL PARTS LIST

NOTE:

- *Parts whose parts numbers are omitted are subject to being not supplied.*
- *The part numbers shown below indicate chip components.*

  Chip Resistor

  RS1/◯S◯◯◯J,RS1/◯◯S◯◯◯J

  Chip Capacitor (except for CQS.....)

  CKS....., CCS....., CSZS.....
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Meaning of the figures and others in the parentheses in the parts list.*

  Example) IC 301 is on the point (face A, 91 of x-axis, and 111 of y-axis) of the corresponding PC board.

  IC 301 (A, 91, 111) IC NJM2068V
- *The expression of the unit in this manual is shown by u instead of µ. Please do not make a mistake.*

A:DEH-P310UB/XS/UC
B:DEH-P3100UB/XS/UC
C:DEH-P3100UB/XS/EW
D:DEH-3100UB/XS/ES

Unit Number : YWM5360(A)
Unit Number : YWM5361(B)
Unit Number : YWM5359(C)
Unit Number : YWM5362(D)
Unit Name : Tuner Amp Assy
Unit Number : (A)
Unit Number : (B)
Unit Number : (C)
Unit Number : (D)
Unit Name : Keyboard Unit
Unit Number : CWX3727
Unit Name : CD Core Unit(S10.5iPod-C3-CLASS1)

model

A:DEH-P310UB/XS/UC
B:DEH-P3100UB/XS/UC
C:DEH-P3100UB/XS/EW
D:DEH-3100UB/XS/ES

A

Unit Number : YWM5360(A)
Unit Number : YWM5361(B)
Unit Number : YWM5359(C)
Unit Number : YWM5362(D)
Unit Name : Tuner Amp Assy

MISCELLANEOUS

Circuit Symbol and No.		Part No.
IC 101	(B,70,67) IC(A,B,C)	HA12241FP
IC 151	(B,135,85) IC	PML018A
IC 251	(B,46,65) IC	BD6538G
IC 301	(A,104,139) IC	PAL007C
IC 401	(B,165,30) IC	NJM2885DL1-33
IC 501	(B,16,32) IC	BD9007F
IC 601	(B,96,73) IC(A,B)	PEG516A8
	(B,96,73) IC(C)	PEG513A8
	(B,96,73) IC(D)	PEG517A
IC 702	(B,57,28) IC	NJM2885DL1-33
IC 921	(A,6,121) IC	NJM2388F84
IC 961	(B,77,49) IC	S-80835CNMC-B8U
Q 101	(B,40,96) Transistor(A,B,C)	LSA1576UB
Q 102	(B,30,115) Transistor(A,B,C)	LTC114EUB
Q 351	(B,165,126) Transistor	RT3N66M
Q 353	(B,136,122) Transistor(A,B,D)	RT3N66M
Q 401	(B,156,46) Transistor(C)	UMH1N
Q 402	(B,156,51) Transistor(C)	UMH1N
Q 451	(B,117,120) Transistor	LTC124EUB
Q 453	(B,116,117) Transistor	RT3T22M
Q 701	(B,20,61) Transistor	RT3T22M
Q 702	(A,7,70) Transistor	2SD2396
Q 841	(B,112,15) Transistor	2SA1036K
Q 842	(B,116,13) Transistor	LTC114EUB
Q 851	(B,32,16) Transistor	2SA1036K
Q 852	(B,23,17) Transistor	LTC114EUB
Q 911	(A,7,105) Transistor	2SD2396
Q 912	(B,15,73) Transistor	RT3T22M
Q 931	(B,64,95) Transistor	RT3CLLM
Q 951	(B,111,107) Transistor(C)	2SA1037K
D 454	(A,94,106) Diode	1SS133
D 501	(B,23,43) Diode	RB060L-40
D 502	(A,15,58) Diode	1SR139-400
D 701	(A,26,66) Diode	HZS7L(C3)
D 801	(B,79,13) Varistor	EZJZ1V270RM
D 802	(B,81,9) Varistor	EZJZ1V270RM
D 803	(B,83,10) Varistor	EZJZ1V270RM

Circuit Symbol and No.		Part No.
D 804	(B,76,13) Varistor	EZJZ1V270RM
D 805	(B,46,9) Varistor	EZJZ1V270RM
D 806	(B,63,13) Varistor	EZJZ1V270RM
D 807	(B,51,9) Varistor	EZJZ1V270RM
D 808	(B,61,13) Varistor	EZJZ1V270RM
D 809	(B,80,13) Varistor	EZJZ1V270RM
D 810	(B,97,16) Varistor	EZJZ1V800AM
D 811	(B,68,13) Varistor	EZJZ1V800AM
D 812	(B,41,10) Varistor	EZJZ1V270RM
D 813	(B,66,13) Varistor	EZJZ1V270RM
D 901	(A,74,111) Diode	1SR139-400
D 902	(A,77,108) Diode	1SR139-400
D 903	(A,61,104) Diode	1SR139-400
D 904	(A,59,104) Diode	1SR139-400
D 911	(A,15,81) Diode	1SR139-400
D 912	(A,15,76) Diode	HZS6L(B2)
D 931	(A,55,97) Diode	HZS7L(C3)
D 932	(A,53,94) Diode	HZS7L(A1)
D 951	(B,108,109) Diode(C)	MC2848-11
ZNR401	(B,164,113) Surge Protector	IMSA-6801-01Y901
L 101	(A,72,71) Inductor(A,B,C)	LAU2R2K
L 161	(A,122,100) Inductor	LAU2R2K
L 251	(B,49,59) Inductor	CTF1394
L 401	(A,150,91) Inductor	LAU1R0K
L 402	(B,159,108) Inductor	LCTAW220J2520
L 403	(A,151,38) Inductor	LAU1R0K
L 501	(A,28,41) Inductor	YTF5003
L 601	(A,74,54) Ferri-Inductor	LAU100K
L 602	(A,73,52) Inductor	LAU2R2K
L 720	(B,94,39) Chip Cmmon Mode	DTH1197
L 852	(A,37,16) Inductor	LAU2R2K
L 901	(A,38,103) Choke Coil 600 uH	CTH1280
L 951	(A,69,104) Inductor(C)	LAU2R2K
X 601	(A,85,56) Oscillator 15 MHz	YSS5002
FU353	(A,136,129) Poly Switch	RXEF075P
BZ601	(A,29,17) Buzzer(C)	CPV1062

RESISTORS

R 101	(B,31,123) (A,B,C)	RS1/16S181J
R 102	(B,34,115) (A,B,C)	RS1/16S222J
R 103	(B,23,125) (A,B,C)	RS1/16S181J
R 104	(B,35,135) (A,B,C)	RS1/16S101J
R 105	(B,33,136) (A,B,C)	RS1/16S101J
R 106	(B,29,122) (A,B,C)	RS1/16S223J
R 107	(B,25,125) (A,B,C)	RS1/16S223J
R 108	(B,26,125) (A,B,C)	RS1/16S102J
R 109	(B,28,122) (A,B,C)	RS1/16S102J
R 110	(B,36,96) (A,B,C)	RS1/16S332J
R 111	(B,32,112) (A,B,C)	RS1/16S562J
R 112	(B,70,75) (A,B,C)	RS1/16S102J
R 113	(B,77,71) (A,B,C)	RS1/16S472J
R 114	(B,78,71) (A,B,C)	RS1/16S472J
R 116	(B,31,136) (A,B,C)	RS1/16S470J
R 117	(B,30,136) (A,B,C)	RS1/16S150J
R 118	(B,66,74) (A,B,C)	RS1/16S0R0J
R 151	(B,145,89)	RS1/16S102J
R 152	(B,145,87)	RS1/16S102J
R 153	(B,145,86)	RS1/16S102J
R 254	(B,46,67)	RS1/16S681J
R 255	(B,42,67)	RS1/16S473J
R 257	(B,40,69)	RS1/16S104J
R 301	(B,123,112)	RS1/16S471J
R 303	(B,124,109)	RS1/16S471J
R 304	(B,135,109)	RS1/16S471J
R 306	(B,130,110)	RS1/16S471J
R 309	(A,98,107)	RD1/4PU153J
R 351	(B,159,115)	RS1/16S821J
R 352	(B,156,120)	RS1/16S0R0J
R 355	(B,137,118) (A,B,D)	RS1/16S821J
R 356	(B,132,98)	RS1/16S821J
R 358	(B,132,125) (A,B,D)	RS1/16S821J
R 359	(B,163,134)	RS1/16S223J
R 360	(B,158,133)	RS1/16S223J
R 363	(B,135,125) (A,B,D)	RS1/16S223J
R 364	(B,140,126) (A,B,D)	RS1/16S223J
R 381	(B,136,125) (A,B,D)	RS1/16S0R0J
R 382	(B,140,122) (A,B,D)	RS1/16S0R0J
R 384	(B,148,118)	RS1/16S0R0J
R 393	(B,142,129) (A,B,D)	RS1/16S0R0J
R 394	(B,146,129)	RS1/16S0R0J
R 401	(B,150,56)	RS1/16S681J
R 402	(B,157,79) (C)	RS1/16S681J
R 403	(B,156,85)	RS1/16S681J
R 404	(B,156,89)	RS1/16S681J
R 405	(B,157,90)	RS1/16S681J
R 406	(B,156,92)	RS1/16S681J
R 407	(B,156,93) (A,B)	RS1/16S0R0J
	(B,156,93) (C)	RS1/16S102J
R 408	(B,142,48) (C)	RS1/16S223J
R 409	(B,146,54) (C)	RS1/16S223J
R 410	(B,147,49) (C)	RS1/16S223J
R 411	(B,143,43) (C)	RS1/16S223J
R 413	(B,156,42) (C)	RS1/16S221J
R 414	(A,157,24)	RD1/4PU4R7J
R 415	(B,156,48) (C)	RS1/16S221J
R 421	(B,115,75)	RS1/16S0R0J
R 451	(B,121,118)	RS1/16S103J
R 452	(B,119,122)	RS1/16S221J
R 453	(B,121,126)	RS1/16S153J
R 454	(A,117,112)	RD1/4PU102J
R 501	(B,25,29)	RS1/10SR471J
R 502	(B,28,23)	RS1/16S0R0J
R 503	(B,25,24)	RS1/16S4702D
R 504	(B,23,24)	RS1/16S6801F
R 505	(B,25,34)	RS1/16S1002F
R 506	(B,25,31)	RS1/16S393J
R 507	(B,71,62)	RS1/16S222J
R 509	(B,10,33)	RS1/16S392J
R 510	(B,10,30)	RS1/16S473J
R 512	(B,49,22)	RS1/16S0R0J
R 513	(B,24,22)	RS1/16S0R0J
R 602	(B,82,63)	RS1/16S103J
R 603	(B,104,88) (A,C,D)	RS1/16S103J
R 604	(B,114,78)	RS1/16S681J
R 605	(B,112,76)	RS1/16S681J
R 606	(B,99,48) (A,C,D)	RS1/16S103J
R 607	(B,112,77)	RS1/16S681J
R 608	(B,98,52) (C)	RS1/16S104J
R 609	(B,101,54) (D)	RS1/16S104J

Circuit Symbol and No.		Part No.
R 610	(B,110,81)	RS1/16S473J
R 611	(B,87,60)	RS1/16S102J
R 613	(B,106,88)	RS1/16S104J
R 615	(B,110,51)	RS1/16S222J
R 616	(B,35,28)	RS1/16S473J
R 617	(B,99,52)	RS1/16S0R0J
R 618	(B,71,60) (C)	RS1/16S102J
R 619	(B,112,74) (C)	RS1/16S0R0J
R 620	(B,115,83)	RS1/16S0R0J
R 621	(B,18,141) (A,C,D)	RS1/16S102J
R 622	(B,12,142) (A,C,D)	RS1/16S102J
R 627	(B,122,78)	RS1/16S102J
R 628	(B,13,139) (B)	RS1/16S104J
R 629	(B,15,140) (B)	RS1/16S104J
R 653	(B,132,37) (C,D)	RS1/16S104J
R 701	(A,15,63)	RD1/4PU271J
R 703	(B,49,44)	RS1/16S472J
R 704	(B,32,27)	RS1/16S104J
R 705	(B,49,47)	RS1/16S472J
R 706	(B,49,48)	RS1/16S104J
R 707	(B,36,29)	RS1/16S104J
R 708	(B,47,51)	RS1/16S221J
R 709	(B,35,25)	RS1/16S102J
R 710	(B,49,45)	RS1/16S221J
R 711	(B,37,41)	RS1/16S221J
R 712	(B,49,42)	RS1/16S221J
R 713	(B,35,26)	RS1/16S221J
R 714	(B,49,54)	RS1/16S104J
R 715	(B,110,41)	RS1/16S12R0F
R 716	(B,110,38)	RS1/16S12R0F
R 803	(B,107,48)	RS1/16S473J
R 804	(B,96,48)	RS1/16S222J
R 805	(B,94,48)	RS1/16S222J
R 806	(B,82,16)	RS1/16S222J
R 807	(B,74,76)	RS1/16S222J
R 808	(B,68,54)	RS1/16S104J
R 809	(B,61,17)	RS1/16S222J
R 810	(B,96,44)	RS1/16S0R0J
R 811	(B,96,52)	RS1/16S473J
R 812	(B,94,44)	RS1/16S0R0J
R 813	(B,92,48)	RS1/16S104J
R 814	(B,94,52)	RS1/16S102J
R 815	(B,93,52)	RS1/16S102J
R 816	(B,116,15)	RS1/16S1R0J
R 818	(B,50,11)	RS1/16S0R0J
R 819	(B,51,19)	RS1/16S103J
R 824	(B,108,51)	RS1/16S102J
R 825	(B,69,56)	RS1/16S102J
R 841	(B,108,15)	RS1/16S103J
R 842	(B,111,13)	RS1/16S472J
R 851	(B,33,20)	RS1/16S153J
R 852	(B,23,19)	RS1/16S472J
R 853	(B,39,15)	RS1/16S222J
R 911	(B,20,71)	RS1/16S223J
R 912	(A,15,78)	RD1/4PU152J
R 922	(B,10,110)	RS1/16S473J
R 931	(B,67,56)	RS1/16S104J
R 932	(B,100,100)	RS1/16S104J
R 933	(B,63,97)	RS1/16S104J
R 934	(B,63,98)	RS1/16S473J

Circuit Symbol and No.		Part No.
R 935	(B,59,92)	RS1/16S473J
R 936	(B,59,99)	RS1/16S473J
R 937	(B,62,118)	RS1/16S472J
R 938	(B,59,126)	RS1/4SA102J
R 951	(B,106,107)	RS1/16S473J
R 952	(B,106,105) (C)	RS1/16S102J
R 953	(B,115,108) (C)	RS1/16S472J
R 955	(A,71,104) (C)	RD1/4PU153J
R 962	(B,71,46)	RS1/16S822J
R 967	(B,73,46)	RS1/16S102J
R 968	(B,97,48)	RS1/16S0R0J
R 969	(B,34,74)	RS1/4SA0R0J
R 972	(B,87,13)	RS1/16S0R0J
R 973	(B,135,42) (C,D)	RS1/16S104J

CAPACITORS

C 101	(B,28,136) (A,B,C)	CKSRYB104K25
C 104	(B,70,73) (A,B,C)	CKSRYB103K50
C 151	(B,111,96) (A,B,C)	CKSRYB105K10
C 152	(B,117,96) (A,B,C)	CKSRYB105K10
C 153	(B,159,75)	CKSRYB224K10
C 154	(B,145,78)	CKSRYB105K10
C 155	(B,163,72)	CKSRYB224K10
C 156	(B,124,78)	CKSRYB105K10
C 157	(B,112,96) (A,B,C)	CKSRYB105K10
C 158	(B,115,96) (A,B,C)	CKSRYB105K10
C 159	(B,124,81)	CKSRYB105K10
C 160	(A,123,84)	CEJQ100M16
C 162	(A,123,89)	CEJQ470M10
C 163	(B,123,87)	CKSRYB104K25
C 165	(A,135,98)	CEJQ100M16
C 170	(B,145,76)	CKSRYB104K25
C 251	(B,47,61)	CKSRYB105K10
C 252	(B,42,64)	CKSRYB105K10
C 305	(B,134,114)	CKSQYB474K25
C 306	(B,127,114)	CKSQYB474K25
C 307	(B,129,114)	CKSQYB474K25
C 308	(B,132,114)	CKSQYB474K25
C 309	(B,125,135)	CKSQYB225K10
C 310	(B,128,132)	CKSQYB225K10
C 311	(A,103,128)	CEJQ100M16
C 313	(A,51,124) 3 300 uF/16 V	CCH1494
C 315	(B,133,118)	CKSRYB474K10
C 316	(B,124,115)	CKSRYB474K10
C 317	(B,122,115)	CKSRYB474K10
C 318	(B,131,118)	CKSRYB474K10
C 351	(A,130,98)	CEJQ2R2M50
C 352	(A,140,98)	CEJQ2R2M50
C 355	(A,130,104) (A,B,D)	CEJQ2R2M50
C 356	(A,146,104) (A,B,D)	CEJQ2R2M50
C 401	(A,154,61)	CEJQ470M6R3
C 402	(B,157,59)	CKSRYB103K50
C 403	(B,157,43)	CKSRYB103K50
C 404	(B,164,25) (C)	CKSYB475K10
C 405	(A,154,103)	CEJQ101M10
C 406	(B,167,95)	CKSRYB104K25
C 407	(B,159,68)	CKSRYB103K50
C 408	(A,157,31)	CEJQ220M10
C 410	(B,154,27) (A,B,D)	CKSRYB474K10
C 411	(B,167,93) (A,B,D)	CCSRCH470J50

Circuit Symbol and No.		Part No.
C 412	(B,128,135)	CKSRYB105K10
C 451	(A,119,126)	CEJQ330M10
C 501	(A,28,27) 150 uF/6.3 V	CCH1804
C 502	(A,17,51)	CEJQ221M16
C 503	(B,22,30)	CCSRCH330J50
C 504	(B,14,37)	CKSQYB225K16
C 506	(B,25,32)	CKSRYB153K50
C 513	(B,63,64)	CCSRCH680J50
C 601	(B,82,59)	CCSRCH180J50
C 602	(B,86,58)	CCSRCH180J50
C 603	(B,79,57)	CKSRYB105K10
C 604	(B,91,48)	CKSRYB105K10
C 605	(A,84,48)	CEJQ100M16
C 606	(B,92,44)	CKSRYB104K25
C 607	(A,77,44)	CEJQ100M16
C 609	(B,115,81)	CCSRCH470J50
C 621	(B,116,78)	CCSRCH470J50
C 701	(B,21,58)	CKSRYB473K25
C 703	(A,24,54)	CEJQ101M10
C 704	(B,138,68)	CKSRYB105K10
C 705	(B,126,78)	CKSRYB105K10
C 708	(A,39,27)	CEJQ220M10
C 709	(B,47,29)	CKSRYB105K10
C 710	(B,45,28)	CKSRYB474K10
C 720	(B,41,55)	CKSRYB105K10
C 802	(B,46,10)	CKSRYB104K25
C 851	(B,25,13)	CKSRYB104K25
C 901	(B,54,118)	CKSRYB104K25
C 911	(A,15,69)	CEJQ470M10
C 912	(B,21,74)	CKSRYB103K50
C 913	(A,24,74)	CEAT102M16
C 921	(B,11,113)	CKSRYB103K50
C 922	(A,17,99)	CEJQ221M10
C 923	(A,15,117)	CEJQ101M16
C 924	(B,14,115)	CKSRYB103K50
C 961	(B,72,48)	CKSRYB473K25
C 962	(A,86,44)	CEJQ100M16

B

Unit Number : (A)
Unit Number : (B)
Unit Number : (C)
Unit Number : (D)
Unit Name : Keyboard Unit

MISCELLANEOUS

IC 1	(B,94,18) IC	PD6538A
IC 2	(A,107,7) Remote IC	GP1UXC14RK
Q 4	(B,53,25) Transistor	LTC114EUB
Q 7	(B,46,32) Chip Transistor	2SD2114K
D 1	(B,104,12) Diode	MC2848-11
D 2	(B,107,11) Diode	MC2846-11
D 3	(A,50,22) White LED	NESW505C-5273
D 5	(A,42,10) LED(A,B)	CL-195PG-CD
	(A,42,10) LED(C)	CL-195SR-CD
	(A,42,10) LED(D)	CL-197HB1-D(CDE)
D 6	(A,147,40) LED(A,B)	CL-195PG-CD
	(A,147,40) LED(C)	CL-195SR-CD
	(A,147,40) LED(D)	CL-197HB1-D(CDE)
D 7	(A,6,34) LED(A,B)	CL-195PG-CD
	(A,6,34) LED(C)	CL-195SR-CD
	(A,6,34) LED(D)	CL-197HB1-D(CDE)
D 8	(A,7,40) LED(A,B)	CL-195PG-CD
	(A,7,40) LED(C)	CL-195SR-CD
	(A,7,40) LED(D)	CL-197HB1-D(CDE)
D 9	(A,6,9) LED(A,B)	CL-195PG-CD
	(A,6,9) LED(C)	CL-195SR-CD
	(A,6,9) LED(D)	CL-197HB1-D(CDE)
D 10	(A,13,9) LED(A,B)	CL-195PG-CD
	(A,13,9) LED(C)	CL-195SR-CD
	(A,13,9) LED(D)	CL-197HB1-D(CDE)
D 11	(A,16,31) LED(A,B)	CL-195PG-CD
	(A,16,31) LED(C)	CL-195SR-CD
	(A,16,31) LED(D)	CL-197HB1-D(CDE)
D 12	(A,26,28) LED(A,B)	CL-195PG-CD
	(A,26,28) LED(C)	CL-195SR-CD
	(A,26,28) LED(D)	CL-197HB1-D(CDE)
D 13	(A,26,9) LED(A,B)	CL-195PG-CD
	(A,26,9) LED(C)	CL-195SR-CD
	(A,26,9) LED(D)	CL-197HB1-D(CDE)
D 14	(A,42,26) LED(A,B)	CL-195PG-CD
	(A,42,26) LED(C)	CL-195SR-CD
	(A,42,26) LED(D)	CL-197HB1-D(CDE)
D 15	(A,57,8) LED(A,B)	CL-195PG-CD
	(A,57,8) LED(C)	CL-195SR-CD
	(A,57,8) LED(D)	CL-197HB1-D(CDE)
D 23	(B,137,18) Varistor	EZJZ1V800AM
D 24	(B,135,18) Varistor	EZJZ1V800AM
D 42	(B,127,13) Diode	MALS068X
D 43	(B,129,9) Diode	MALS068X
D 44	(B,131,9) Diode	MALS068X
X 1	(B,102,7) Ceramic Resonator 5.00 MHz	CSS1547
S 1	(A,16,33) Push Switch	CSG1155
S 2	(A,6,7) Push Switch	CSG1155
S 3	(A,6,37) Push Switch	CSG1155
S 4	(A,23,29) Push Switch	CSG1155
S 5	(A,44,29) Push Switch	CSG1155
S 6	(A,44,8) Push Switch	CSG1155
S 7	(A,53,7) Push Switch	CSG1155
S 8	(A,16,6) Push Switch	CSG1155
S 9	(A,23,8) Push Switch	CSG1155
S 10	(A,146,37) Push Switch	CSG1155
S 28	(A,33,18) Switch(MULTI-CONTROL)	CSX1144
LCD1	(A,56,31) LCD	YAW5101

RESISTORS

R 1	(B,67,19)	RS1/16S222J
R 2	(B,96,5)	RS1/16S222J
R 3	(B,58,22)	RS1/4SA122J
R 4	(B,152,40) (A,B)	RS1/4SA681J
	(B,152,40) (C)	RS1/4SA122J
	(B,152,40) (D)	RS1/4SA392J
R 5	(B,11,23) (A,B)	RS1/4SA681J
	(B,11,23) (C)	RS1/4SA122J
	(B,11,23) (D)	RS1/4SA392J
R 6	(B,10,18) (A,B)	RS1/4SA681J
	(B,10,18) (C)	RS1/4SA122J
	(B,10,18) (D)	RS1/4SA392J

Circuit Symbol and No.		Part No.
R 7	(B,16,26) (A,B)	RS1/4SA681J
	(B,16,26) (C)	RS1/4SA122J
	(B,16,26) (D)	RS1/4SA392J
R 8	(B,22,28) (A,B)	RS1/4SA681J
	(B,22,28) (C)	RS1/4SA122J
	(B,22,28) (D)	RS1/4SA392J
R 10	(A,63,9) (A,B)	RS1/16S181J
	(A,63,9) (C)	RS1/16S331J
	(A,63,9) (D)	RS1/16S102J
R 22	(B,20,10)	RS1/16S222J
R 23	(B,18,12)	RS1/16S332J
R 24	(B,19,7)	RS1/16S822J
R 25	(B,22,8)	RS1/16S273J
R 26	(A,79,7)	RS1/16S473J
R 31	(B,105,8)	RS1/16S103J
R 32	(B,102,4)	RS1/16S2R2J
R 34	(B,107,14)	RS1/16S121J
R 37	(B,44,27)	RS1/16S103J
R 38	(B,46,29)	RS1/16S103J
R 40	(B,133,15)	RS1/16S101J
R 41	(B,128,15)	RS1/16S101J

CAPACITORS

C 1	(B,107,7)	CKSYF106Z10
C 2	(B,112,16)	CKSRYF104Z25
C 3	(B,114,16)	CKSRYF104Z25
C 4	(B,117,17)	CKSRYF104Z25
C 5	(B,129,13)	CKSRYB472K50
C 6	(B,131,15)	CKSRYB472K50
C 7	(B,152,37)	CCSRCH101J50
C 8	(B,149,37)	CCSRCH102J50
C 9	(B,151,37)	CKSRYB103K50
C 10	(B,137,23)	CKSRYF104Z25

C

Unit Number : CWX3727

Unit Name : CD Core Unit(S10.5iPod-C3-CLASS1)

MISCELLANEOUS

IC 201	(A,35,46)	IC	PE5661A
IC 205	(B,24,49)	IC	341S2159
IC 301	(A,28,15)	IC	BA5839FP
Q 101	(B,58,69)	Transistor	2SA1577
Q 102	(B,48,58)	Chip Transistor	2SB1689
Q 201	(B,27,54)	Transistor	2SA1577
X 201	(A,22,37)	Ceramic Resonator 16.934 MHz	CSS1603
X 205	(B,33,63)	Oscillator 48.000 MHz	CSS1753
S 901	(A,55,37)	Switch(HOME)	CSN1067
S 903	(B,19,58)	Switch(DSCSNS)	CSN1067
S 904	(B,40,68)	Switch(12EJ)	CSN1068
S 905	(B,25,69)	Switch(8EJ)	CSN1068

RESISTORS

R 101	(B,61,74)	RS1/10SR2R4J
R 102	(B,61,72)	RS1/10SR2R4J
R 103	(B,61,71)	RS1/10SR2R7J
R 104	(B,53,66)	RS1/16SS222J
R 105	(B,44,57)	RS1/16SS102J
R 107	(B,52,60)	RS1/16SS105J
R 202	(A,27,32)	RS1/16SS473J
R 203	(A,51,44)	RS1/16S473J
R 204	(A,23,58)	RS1/16SS221J
R 206	(B,10,26)	RS1/16SS104J
R 209	(B,18,52)	RS1/16SS103J
R 210	(B,10,23)	RS1/16SS102J
R 214	(B,49,50)	RS1/16SS472J
R 216	(B,48,49)	RS1/16SS472J
R 221	(A,51,48)	RS1/16SS103J
R 222	(A,51,46)	RS1/16SS103J
R 223	(B,13,43)	RS1/16SS473J
R 225	(A,50,50)	RS1/16SS103J
R 226	(A,50,51)	RS1/16SS393J
R 227	(B,47,51)	RS1/16SS562J
R 228	(B,44,51)	RS1/16SS122J
R 229	(B,46,53)	RS1/16SS472J
R 230	(B,21,25)	RS1/16SS0R0J
R 232	(B,45,51)	RS1/16SS122J
R 233	(B,26,59)	RS1/16SS103J
R 234	(B,22,26)	RS1/16SS473J
R 235	(A,26,59)	RS1/16SS473J
R 237	(A,24,35)	RS1/16SS151J
R 240	(B,14,26)	RS1/16S473J
R 241	(B,13,25)	RS1/16SS103J
R 244	(B,22,55)	RS1/16SS473J
R 249	(B,14,50)	RS1/16SS103J
R 250	(B,19,50)	RS1/16SS101J
R 252	(B,18,47)	RS1/16SS101J
R 254	(A,25,64)	RS1/16SS104J
R 255	(A,26,63)	RS1/16SS104J
R 256	(A,25,62)	RS1/16SS104J
R 259	(A,27,66)	RS1/16SS0R0J
R 261	(A,26,65)	RS1/16SS104J
R 262	(A,29,59)	RS1/16SS0R0J
R 263	(A,27,63)	RS1/16SS0R0J
R 273	(B,18,48)	RS1/16SS103J
R 277	(B,18,50)	RS1/16SS103J
R 282	(A,30,61)	RS1/16SS120J
R 283	(A,29,61)	RS1/16SS120J
R 284	(B,29,63)	RS1/16SS153J
R 285	(B,28,63)	RS1/16SS153J
R 291	(B,42,62)	RS1/16SS272J
R 292	(B,24,43)	RS1/16SS272J
R 293	(B,27,52)	RS1/16SS472J
R 294	(A,31,62)	RS1/16SS471J
R 307	(A,35,19)	RS1/16SS183J
R 308	(A,37,19)	RS1/16SS183J
R 309	(A,35,21)	RS1/16SS183J
R 310	(A,37,22)	RS1/16SS183J
R 601	(B,30,31)	RS1/16SS0R0J
R 602	(B,27,31)	RS1/16SS0R0J
R 606	(B,28,23)	RS1/16S0R0J
R 701	(B,11,37)	RS1/16SS221J
R 702	(A,23,56)	RS1/16SS221J
R 708	(B,15,37)	RS1/16S0R0J
R 712	(B,14,54)	RS1/16SS0R0J
R 713	(B,14,53)	RS1/16SS0R0J

CAPACITORS

Circuit Symbol and No.		Part No.
C 106	(B,56,67)	CKSQYB475K10
C 202	(A,28,57)	CKSSYB104K10
C 204	(A,23,59)	CKSSYB103K16
C 205	(B,27,41)	CKSQYB475K10
C 206	(A,23,40)	CKSSYB104K10
C 207	(A,24,37)	CKSRYB104K16
C 209	(B,35,34)	CEVW220M6R3
C 210	(B,29,37)	CKSSYB104K10
C 211	(A,28,35)	CKSSYB104K10
C 212	(A,28,30)	CKSRYB104K16
C 213	(A,46,39)	CKSSYB104K10
C 214	(A,29,33)	CKSSYB104K10
C 216	(A,51,52)	CKSSYB332K50
C 217	(A,48,51)	CKSSYB104K10
C 218	(A,50,52)	CKSSYB473K10
C 219	(A,47,53)	CKSSYB104K10
C 220	(A,48,53)	CKSSYB182K50
C 221	(A,46,54)	CKSSYB104K10
C 222	(B,45,53)	CCSSCH560J50
C 223	(B,47,53)	CCSSCH4R0C50
C 224	(A,44,55)	CKSSYB104K10
C 226	(A,42,59)	CCSSCH680J50
C 227	(A,42,61)	CCSSCH470J50
C 228	(B,41,61)	CKSSYB103K16
C 229	(B,48,60)	CKSSYB104K10
C 236	(A,49,58)	CKSSYB104K10
C 239	(B,46,51)	CCSSCH220J50
C 240	(A,38,61)	CKSSYB104K10
C 243	(B,22,41)	CKSQYB475K10
C 250	(A,52,48)	CKSSYB102K50
C 251	(A,52,46)	CKSSYB102K50
C 260	(A,28,61)	CKSSYB104K10
C 261	(B,33,66)	CCSSCH8R0D50
C 262	(B,31,66)	CCSSCH8R0D50
C 290	(B,26,45)	CKSSYB104K10
C 293	(B,43,61)	CKSSYB102K50
C 294	(B,24,41)	CKSSYB104K10
C 303	(A,36,19)	CKSSYB472K25
C 304	(A,36,21)	CKSSYB223K16
C 307	(A,22,11)	CKSRYB104K16
C 308	(B,11,18)	CKSRYB105K10
C 703	(B,14,35)	CCSSCH101J50
C 704	(B,11,36)	CKSSYB102K50
C 711	(A,31,25)	CKSSYB104K10

Miscellaneous Parts List

	Pickup Unit(P10.5)(Service)	CXX1942
M 1	Motor Unit(SPINDLE)	CXC7134
M 2	Motor Unit(LOADING/CARRIAGE)	CXC4026